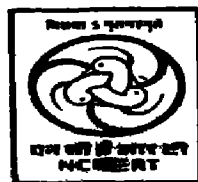


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FOREWORD

The activity of documentation and dissemination of Educational Research Abstracts through Indian Educational Abstracts (IEA) has sustained itself from 1996 and the present issue is the fifth one in the series. IEA, the biannual publication primarily aims at documenting all research studies related to education/educational processes at all levels, and it aims to facilitate researchers in updating themselves with the recent researches conducted in various areas of education.

The fifth issue covers 150 abstracts covering various educational areas. This issue contains Ph.D. studies, articles/papers published in professional journals and independent studies conducted by researchers. For the convenience of readers, it is attempted to prepare university index, author index, faculty index, journal index and subject index. We are thankful to all the contributors for their cooperation extended to us in this venture. The efforts put in by the project team deserves a special mention. Suggestions and comments are welcome for the improvement of further issues.

It is hoped that more and more editors of professional journals, researchers, institutional/departmental heads of various institutions/universities related to educational research extend cooperation by way of communicating all their research work to NCERT so as to help in generating a pool of researches and to document them for a comprehensive dissemination purpose.

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Rana, G. 1997. **A comparative study of the growth of education in India, United Kingdom, Malaysia and Kenya in value perspective during 20th century A.D.** Ph.D., Edu. *Maharshi Dayanand Univ.* Guide: Dr. B.S. Dagaur.

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Patrick, Francina C.J. 1995. **Effectiveness of two feedback corrective procedures used in mastery learning strategy in terms of students' achievement and retention in chemistry.** Ph.D., Edu. Karnatak Univ. Guide: Prof. Shashikala Deshpande. 72

ORGANIZATION, ADMINISTRATION AND MANAGEMENT OF EDUCATION

Chakravarti, K.K.; Panda, B.N.; Tripathy, P.S. and Mishra, K.N. 1996. **Identification of minimum support facilities required for effective implementation of competency-based MLL approach to teaching-learning at the primary stage in the DPEP district Dhenkanal of Orissa.** Independent study. Bhubaneswar: Regional Institute of Education. (DPEP study). 73

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✓ Das, R. 1995. **A study of principals' instructional management behaviour, students' performance and organizational climate in secondary schools.** Ph.D., Edu. Kurukshetra Univ. Guide: Dr. Sheela Mangla. 74

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✓ Khare, Suniti and Grewal, Avinash. 1997. **Relationship among speed of information processing ability, creativity and academic achievement.** *Psycho-Lingua*, Vol. 27(1), 53-56. 78

✓ Maikhuri, R. and Pande, Shashi Kiran. 1997. **Self-concept of adolescents in relation to their academic achievement.** *Psycho-Lingua*, Vol. 27(2), 121-124. ✓ 78

Minnalkodi, B. 1997. **A study of higher secondary school students' achievement in zoology in relation to anxiety, achievement-motivation and self-concept.** Ph.D., Edu. Annamalai Univ. Guide: Dr. (Ms.) S.S. Williams. ✓ 79

Pahuja, Prem Lata. 1992. **Utility of the peer-tutoring in the development of verbal, spatial abilities and academic achievement in Geography : An experimental study.** Ph.D., Edu. Agra Univ. Guide: Dr. P.N. Rai. 79

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PHILOSOPHY OF EDUCATION

JAMKAR, S.B. 1994. **A critical appraisal of the educational ideas of Saint Tukdoji Maharaj with reference to present social condition.** Ph.D., Edu. Nagpur Univ. Guide: Dr. Geetadevi G. Patil.

Problem: This study tries to critically analyze educational ideas of Saint Tukdoji Maharaj with reference to present social condition.

Objectives: (i) To critically evaluate Tukdoji's educational thoughts from his literature, and (ii) to evaluate Tukdoji's educational thoughts in the present social context.

Methodology: The sample of the study comprised 500 people belonging to different occupations, i.e. teachers, social workers, educated farmers and other various occupations. Questionnaire, interview and apart from this, *matpradashika* was also used to collect the data. The collected data were treated with percentages.

Major Outcomes: (1) According to Saint Tukdoji Maharaj, the character of a teacher is the most important factor in the present social condition. (2) The parents are fully responsible for the development of their children. (3) Human life and education are related in curriculum. (4) Women education is most important in the present social condition. (5) Nationality is developed through education. [0609]

SOCIOLOGY OF EDUCATION

AGRAWAL, KUSUM. 1997. **A comparative study of parental encouragement amongst the different educational groups of urban and rural adolescents.** *Experiments in Education*, Vol. XXV(10), 204-207.

Problem: This study attempts to compare the difference in parental encouragement among various educational groups of urban and rural adolescents.

Objective: To identify difference, if any, in parental encouragement amongst the different educational sub-groups of urban and rural adolescents.

Methodology: The sample of the study comprised

500 boys of higher secondary schools of the Garhwal region, out of which 250 boys belonged to urban area and 250 belonged to rural locale. They were selected through random selection method. Tool used to collect the data was Parental Encouragement Scale by Uniyal and Agrawal. The collected data were treated with mean, SD and 't' test.

Major Findings: (1) Parental encouragement and educational development were found positively related with each other. (2) The higher development group of the Garhwal region got more amount of parental encouragement than the rural boys of the same category. (3) The urban and rural parents of the middle development group encouraged their sons almost in equal degree. (4) The lower development group of urban boys also received greater parental encouragement than their rural counterparts. [0604]

ANEJA, ANJU AND KAUR, PRAVEEN. 1997. **Family decision-making in opinion of urban youth.** *Psycho-Lingua*, Vol. 27(2), 125-128.

Problem: The present study tries to assess the opinion of the urban youth towards family decision-making.

Objective: To know the opinion of adolescents towards the family decision-making.

Methodology: The sample of the study comprising of 400 boys and girls studying in all the three academic years of graduation from co-educational and non-coeducational institutions belonging to Hissar City, were selected through random selection method. A likert type attitude scale was used to collect the data. The collected data were treated with percentage.

Major Findings: (1) It was observed that the majority of the male and female respondents disagreed on six factors with the attitude of adolescents towards family decision-making. (2) Majority of the respondents agreed on discussing all plans with family members. (3) Majority of the respondents strongly disagreed on women's interference which resulted into unfortunate family decisions. [0628]

SINGH, N. AND BALA, S. 1996. **Study of the perception of VEC members of D.P.E.D.**

in Haryana. Independent study. *Ajmer: Regional Institute of Education.*

Problem: This study is designed to assess the role perception of VEC members for effective functioning of schools and its nature of contribution in promoting community mobilisation for the effectiveness of school.

Objectives: (i) Identification of role of VEC members for community participation in generating awareness and environment building for promoting UPE in DPEP district in Haryana, (ii) to ascertain the role perception of VEC members in DPEP district in Haryana, and (iii) to identify the nature of contribution of VEC members in community participation in various activities in schools.

Methodology: The sample of the study comprised 192 VEC members belonging to ten different categories drawn from two blocks randomly selected from Hissar district of Haryana. Role Perception Inventory (RPI) and interview schedule were used to collect the data. The collected data were analysed using frequency, percentage and chi-square.

Major Findings: (1) Difference was found in proposed and actual number of VEC members. (2) Significant difference was found in expected and perceived role of VEC members. (3) Members having qualification from Classes VI to VIII had greater perception about the expected roles of VEC, and lowest was found in case of post-graduates. (4) Members owning agricultural land had greater perception about expected roles of VEC than members belonging to other occupational groups like agriculture labour, government servant, businessman, etc. (5) Members belonging to joint family had greater perception about expected roles of VEC than members belonging to nuclear family. (6) The greater perception was found to be in case of members below 30 years of age and lowest in case of 51 years and above. It was interesting to note that with the increase in age the perception about expected roles of VEC shifted from VEC to school. (7) The members whose wards were studying in government schools had greater perception about expected roles of VEC than those whose wards were studying in other types of schools. (8) VEC members of Daulatpur and

Salamkhara village had perceived the expected roles of VEC more than 50% and above. In case of other fourteen villages it was found less than 40% or between 40% to 50%. (9) VEC members of Fathehabad block had greater perception about expected roles of VEC than members of Hissar-II block. (10) Item-wise analysis revealed that in general all the nine expected role under the dimension of social functions of VEC towards villagers in general were perceived as a role of VEC than other agencies by the members belonging to all categories. (11) In case of fourteen enlisted roles of VEC in mobilising community participation for UPE it was found 50 % and above in case of only three roles, i.e. (i) Motivate villagers to send all the children of 6-11 age group to school, (ii) To keep continuous contact with community for achieving the target of UPE and (iii) Contact the parents of dropouts to regularise them. (12) It was interesting to note that the role like acquaint villagers with functions of VEC developed sense of belongingness among villagers towards school. Providing opportunities to villagers for participation in school programmes/activities were perceived more to be performances by school than VEC, and roles like organising community meeting to publicise the expansion of primary education and informing parents regarding NEE/Balwari/Anganwari centres were perceived as the roles of *grampanchayat* than VEC. (13) The perception regarding the thirteen enlisted roles of VEC with regard to providing facilities to school/NFEC it was found 50% and above to be performed by *grampanchayat* than VEC. [0594]

HISTORY OF EDUCATION

SAROJINI AMMA, M.P. 1998. **A study of the history and development of Nair Service Society as a voluntary educational agency in Kerala.** Ph.D., Edu. Univ. of Calicut. Guide: Dr. A. Sukumaran Nair.

Problem: It attempts to study the history and development of the Nair Service Society as a voluntary educational agency in Kerala.

Objectives: (i) To study the major social forces and the historical antecedents which led to the creation of a strong community organization of the Nairs, The Nair Service Society (NSS) and

its entry in the field of education as a voluntary agency, (ii) to study the development that occurred in the educational establishment created by the NSS during the period under study, that is, from 1916-1990, divided into four developmental phases, (iii) to study the leadership of the N.S.S. during the formative period of its growth and what were the significant events of the period under study which led to the evolution of the N.S.S. in the present form, and (iv) to study the contribution of the N.S.S. to the total educational development of the state assessed against the socio-political background of the state.

Methodology: The researcher has used historical method. Data from various sources were collected which included accounts, reports, official records, documents and interviews with top leaders of the Nair Service Society. The collected data were analysed qualitatively.

Major Findings: (1) The NSS had played a significant role in the development of the educational institutions of the state and giving leadership to the state in dividing the critical issues related to education. (2) The NSS although created for the upliftment of the Nair community, ended up as a social service organization serving all communities and religions. (3) The NSS had played a crucial role in getting the state accepted as the most literate state in India. (4) The starting of a large number of educational institutes by the N.S.S. during the post independent period was an attempt by the Nair community to restore the past glory and position in the society. (5) The starting of new educational institutions by the NSS had in the long run helped the educational advancement of all communities and the overall development of Kerala. [0629]

PSYCHOLOGY OF EDUCATION

AHMED, SHAHIN. 1994. Effect of playing volleyball on the psycho-social development of the institutionalized female juvenile delinquents. Ph.D., Psy. Univ. of Madras. Guide: Dr. V.D. Swaminathan.

Problem: This study is designed to determine the effect of playing volleyball on the psycho-

social aspects of the institutionalized female juvenile delinquents.

Objectives: (i) To study the effect of playing volleyball on the concentration of institutionalized female juvenile delinquents, (ii) to study the effect of playing volleyball game on the muscular steadiness, and (iii) to find out the effect of playing volleyball game on the sociability and other personality dimensions of institutionalized female juvenile delinquents.

Methodology: The sample of the study comprised 50 female adolescents, (25 female in experimental group and 25 in control group). Their age ranged between 13 to 18 years. The tools used to collect the data included Letter Cancellation Test, Steadiness Tester and Jesness Inventory. The collected data were treated with analysis of co-variance, Duncan's multiple range test and 't' test.

Major Findings: (1) The experimental group showed significant improvement in concentration than the control group. (2) The experimental group showed more significant improvement in muscular steadiness than the control group. (3) The experimental group showed significant improvement in almost all dimensions of personality except immaturity and were found to be significantly superior to those in control group. [0605]

BAIRATHI, RAJEEV. 1997. A critical analysis of communication dynamics in Rajasthan Agricultural University, Bikaner. Ph.D., Extn. Edu. Rajasthan Agricultural Univ. Guide: Prof. B.M. Sharma.

Problem: The study addresses the problem of analysis of the communication structure, communication climate, superiors' communication effectiveness, informal communication pattern and certain behavioural aspects in an agricultural university.

Objectives: (i) To examine the communication contingency structure and communication climate as perceived by various teaching, research, extension and administrative personnel, (ii) to ascertain the superiors' communication effectiveness in the agricultural university in terms of source, message, channel

and receiver characteristics, (iii) to identify the relationship of some selected personal traits with communication climate and superiors' communication effectiveness at varying level in the agricultural university, (iv) to identify the relationship of communication contingency structure and superiors' communication effectiveness with certain behavioural variables, viz., job-satisfaction, organizational commitment, cohesiveness, recognition and decision-making, and (v) to study informal communication pattern in the agricultural university.

Methodology: The sample of the study comprised 250 respondents, (90 teaching, 100 research, 40 extension and 20 administrative). They were selected through proportionate random sampling method. The tools used to collect data were personal interview method and Organizational Communication Assessment Schedule. The collected data were treated using mean, frequency, percentage, coefficient of correlation and test of significance.

Major Findings: (1) The attitude and values of the respondents towards their immediate superiors was observed to be highly favourable. (2) Majority of the respondents had medium to high interpersonal trust and communication apprehension. (3) Communication contingency structure was observed to be very high by all the four categories of respondents. (4) The scientist in the university made average use of various communication channels, though it was high in extension and administrative category. (5) Majority of the scientists had heavy load of communication activities and it was highest in administrative category. (6) Scientists of all categories except administration had developed a strong and effective informal communication network. (7) Scientists associated with teaching, research and extension had lower job-satisfaction and lower involvement in decision-making. (8) Maximum number of respondents favoured the present communication climate prevailing in the agricultural university. The communication climate was significantly and positively associated with attitude and values towards superiors, interpersonal trust, communication contingency structure, communication channel use and informal communication network. (9) Superiors, working

in various capacities of communicating the messages to their subordinates, were moderately successful in all the four categories. The superiors' effectiveness was significantly and positively associated with attitude and values towards superiors, communication channel use, job-satisfaction, informal communication network. [0544]

BHARDWAJ, S.K. 1997. A psycho-social study of adjustment among adolescents. Ph.D., Home Sc. Pandit Ravishankar Shukla Univ. Guide: Dr. R.D. Helode.

Problem: It attempts to study the adjustment among adolescents as related to social and psychological variables.

Objective: To identify how far gender, mother's employment, extraversion and neuroticism play their role in influencing the adjustment of adolescents.

Methodology: The study was conducted on 160 subjects who were selected using stratified incidental sampling technique. The tools used to collect data included Junior Eysenck Personality Inventory by Helode and Adjustment Inventory by Mittal. The collected data were treated using mean, SD, 't' test, and ANOVA.

Major Findings: (1) Extraversion and neuroticism were found to have a powerful impact over global as well as area-wise (home, social, school, emotional and health) adjustment among adolescents. (2) Gender and mother's employment were not related to adolescents' global as well as area-wise adjustment. (3) It was found that global adjustment scores were influenced by the extraversion and neuroticism dimensions of personality. (4) The interaction effects were not found to be significant on any factor. (5) It was found that home adjustment was influenced by the extraversion and neuroticism dimensions of personality. (6) Extraversion, neuroticism and gender had significant effect on health and emotional adjustment. [0677]

JYOTSNA. 1997. A study of relationship between types and levels of intelligence and nature of learning tasks. Ph.D., Psy.

ntiv. Guide: Dr. Amir Singh.

study examines the relationship multifaceted nature of intelligence asks.

To study the relationship of measures of level I ability and level II use of learning, (ii) to study the of different measures of fluid and crystallized intelligence with ng, (iii) to study the relationship asures of level I ability with the uid intelligence and measures of ntelligence, (iv) to study the etween different measures of fluid id crystallized intelligence, (v) to r structures of various measures : and those of learning, (vi) to pping factors between non-verbal intelligence and measures of to discover overlapping factors al measures of intelligence and learning, (viii) to discover ctors between different measures ty and those of learning, (ix) to pping factors between non-verbal ntelligence and verbal measures , and (x) to discover overlapping een non-verbal measures of id measures of level I ability.

The sample of the study comprised of Classes VII to X from four senior ools of Haryana. The age range ts was 11 to 15 years and they iddle socio-economic group. They andomly. The tools used to collect andard Progressive Matrices by 's Culture Fair Intelligence Test, of Hundal General Mental Ability Singh, forward digit span test, t span test, immediate visual digit delayed visual digit memory test, uditory digit memory test and ry digit memory test. The collected ated with frequency distribution, rd deviation, skewness, kurtosis, ions and factor analysis.

s: (1) The correlations between the ree recall and different measures re found to be positive and high.

(2) The correlations between the measure of free recall and different non-verbal measures of intelligence were found to be positive and high. (3) The correlations between the measure of free recall and different verbal measures of intelligence were positive but low. (4) The intercorrelation between the non-verbal measures of intelligence and verbal measures of intelligence were positive but low. (5) The principal component method of factor analysis yielded three factors. They include fluid intelligence, crystallized intelligence and level I ability. (6) The inter battery analysis showed a strong overlap of measures of memory and measures of learning. [0566]

LAXMI, VIJAYA. 1997. **Educational maturity of father as related to academic self-concept and academic motivation.** *Psycho-Lingua*, Vol. 27(1), 61-64.

Problem: The present study aims at finding out the relationship of father's educational maturity with academic self-concept and academic motivation of students.

Objective: To find out the effect of father's educational maturity on the academic self-concept and academic motivation of students.

Methodology: The sample of the study comprised 400 students selected randomly and belonging to parents holding different educational levels. A personal data sheet along with Academic Inventory by Singh were used to collect data. The collected data were analysed using chi-square.

Major Finding: It was found that children belonging to more educated group had higher academic motivation as compared to children having lower academic level of parents. [0601]

MATHUR, K. 1994. **Influence of maternal employment on children's personality.** Ph.D., Psy. Barkatullah Vishwavidyalaya. Guide: Prof. Girishwar Misra.

Problem: It attempts to study the influence of maternal employment on children's personality.

Objectives: (i) To identify the personality patterns of children of employed and unemployed

mothers, (ii) to identify the major influencing variables on the children's personality, and (iii) to study the pattern of disciplinary techniques in the groups of employed and unemployed mothers.

Methodology: The sample of the study comprised 200 mothers (120 employed and 80 unemployed) and 200 children (113 boys and 87 girls) in the age group of 7 to 12 years from Bhopal city. The tools used to collect the data were interview schedule, questionnaire, marital adjustment inventory by Kumar and Rohatgi, Early School Personality Questionnaire by Lal, Story-Pictorial Embedded - Figure Test by Sinha, and "Who am I?" Test of Self Concept. The collected data were treated with coefficients of correlation, chi-square and ANOVA.

Major Findings: (1) Regarding dispositional aspect (personality traits), the children of employed mothers showed greater degree of outgoingness, whereas children of unemployed mothers were found relatively more conscientious, vigorous and placid, and had greater ego strength. Girls as compared to boys of employed mothers' group showed greater outgoingness. (2) Children of employed mothers were found more field independent (psychologically differentiated) as compared to their counterparts from unemployed group. As compared to the girls, boys displayed greater psychological differentiation. (3) The children of employed mothers showed more career aspirations than the children of unemployed mothers. (4) The background variables, child rearing variables and disciplining techniques used by mothers were found to be differentially related to personality characteristics. (5) Employed mothers and unemployed mothers reported similarities as well as differences in the use of disciplinary techniques. (6) Marital relationship of parents was found to be quite positive in both the groups; however, unemployed mothers showed relatively greater degree of marital adjustment. (7) Degree of congruence in the use of disciplinary techniques by parents and perception of these techniques by children; as assessed through a semi-structured measure revealed that there was similarity in the responses of both mothers and the children; however, discrepancy was found in the responses of fathers. (8) Regarding the

impact of type of job on various aspects of family functioning, a large number of teachers reported that utilizing spare time was the main reason for taking job outside the home, whereas, clerks and nurses reported the financial cause. (9) Sharing of responsibilities was reported by more clerks and nurses, whereas teachers did not express the need of help from husband or children. [0613]

MISRA, NAND LAL. 1997. **Psychological study of interactional approach and student career.** *Psycho-Lingua*. Vol. 27(2), 73-80.

Problem: The present study attempts to assess the effect of interactional variables on academic career of a student.

Objective: To investigate into an effective dimension of environmental situation of different types of educational institutions and family background which have differential impact on the career of a student.

Methodology: The sample of the study comprised 200 students who were selected on the basis of their academic success (MLNR, Engineering and PMT examination) and failure (B.Sc. students). The tools used to collect the data included Socio-Economic Status Scale by Singh, Verbal Test of Intelligence by Asthana and Verma, Perception of Teachers Scale and Perception of Parents Scale by Agarwal, Misra and Pandey, and an attributional questionnaire. The collected data were treated with mean, SD, and two-way analysis of variance.

Major Findings: (1) It was observed that respondents of public schools (rural areas) showed more favourable attitude towards their parents than their counterparts in semi-government schools. Similar pattern was found in urban areas too. (2) It was observed that the two groups (rural and urban) significantly differed on perception towards parents. (3) It was found that students belonging to urban areas had a more positive attitude towards their parents than the rural students. (4) It was found that the effect of environmental factor (birth place) was significant. The participants belonging to the rural areas were found to have a more positive attitude towards their teachers than their urban counterparts. (5) It was found

students with academic motivation and test anxiety.

Objective: To find out the relationship of study habits of adolescent students with academic motivation and test anxiety.

Methodology: The sample of the study comprised 105 students (both boys and girls) studying in Class XI in science and arts streams. The students were selected through random sampling technique from the higher secondary schools of Sikar district of Rajasthan. The tools used to collect data included The Keele Academic Motivation Questionnaire adapted in Hindi by B.P. Verma, Test Anxiety Inventory of Spielberger adapted in Hindi by Sharma, Sud and Spielberger and Test of Study Habits and Attitude Test by Joshi and Pandey. The collected data were treated with mean, SD and 't' test.

Major Findings: (1) It was found that adolescent students having high level of academic motivation scored more on study habits than adolescent students possessing average level of academic motivation and low level of academic motivation. But there was no difference in the study habits of average and low academically motivated adolescents. (2) Students belonging to high test anxiety group scored significantly less study habits scores than their counterparts with average test anxiety and low test anxiety. Also, students belonging to average test anxiety had lower study habits scores than students belonging to low test anxiety. [0625]

MENTAL HEALTH

PATIL, K.S. 1995. **Drug addiction among youth in Goa with special emphasis on treatment and rehabilitation.** Ph.D., Soc. Work. Nagpur Univ. Guide: Dr. V.V. Devasia.

Problem: This study attempts to analyse the problem of drug addiction among the youth of Goa, their rehabilitation and remedial measurements.

Objectives: (i) To study the nature and pattern of drug use among the youths in Goa; (ii) to identify the volume and magnitude of youth drug addicts, (iii) to inquire into the causes of impact

of drug use among the youth with special reference to socio-psychological correlates, (iv) to elucidate the human environment in drugs in relation to their family and other institutions, (v) to verify the impact of drug addiction among youth, (vi) to understand society's attitude towards drug addicts and the social implications of drug use and its consequences, (vii) to find out programmes for the treatment of drug addicts, (viii) to identify various possibilities of rehabilitation of drug addicts, and (ix) to suggest a successful prevention programme and the control of drug trafficking.

Methodology: The sample of the study comprised 174 drug addicted youths who were staying in different parts of Goa. Their age ranged between 15 to 35 years. The tools used to collect data were interview schedule, observation schedule and related documents. The collected data were treated with chi-square and percentages.

Major Findings: (1) Majority of the respondents i.e., 130 out of 174, were in the age group of 25 to 30 years and had their first drug encounter at school level. Schools were a convenient place to start the drug use. (2) Unemployment influenced the respondent to take drugs, which turned out to be 1.5 times that of service status. (3) 21.84% of parents were aware about drug indulgence of their wards against 78.16% awareness by siblings. (4) Lower income group respondents were found to be more prone to drugs. The respondents who had taken to drugs were from relatively smaller family size. (5) Majority of the respondents were from educated and highly educated groups. Similarly, most of the families were engaged in employment of private jobs. 88.5% of the families were earning through business, service or jobs. (6) Respondents spending Rs.80/- and above per day were found to be 4.6 times higher than that of respondents spending Rs.60/- to Rs.80/- per day. (7) There were two treatment centres for the drug dependents in Goa. Detoxification Centre at Corlimmapusa and Institute of Psychiatry and Human Behaviour, Panaji. (8) Family pressure was found to be three times higher as compared to all the other factors put together in admitting the respondents to treatment centres. (9) 51.15% received treatment one to three times, whereas 35.63% received treatment four to six times. (10) Most

of them i.e., 63.22% had taken chemo-therapy treatment whereas 36.78% of the total respondents had received religious counselling, N.A. meeting treatment services along with chemo-therapy. (11) The majority of the total respondents experienced negative attitude of the public towards drug addicts. (12) It was found that most of the respondents had a positive feeling and they felt happy after availing the rehabilitation facilities. (13) The maximum number of respondents were of the opinion that drug addiction as a problem had increased in the poor social segment of the population as compared to middle and upper class. [0679]

VERMA, SUMAN; GUMRA, MONIKA AND BAL, HARSH. 1995. **Experiencing daily hassles and a sense of well being in the college youth.** *Journal of Community Guidance and Research*, Vol. 12(2), 77-85.

Problem: The study focuses on areas that are the cause of daily hassles in the college youth, and a sense of well-being in the youth.

Objectives: (i) To examine different domains of daily hassles in the college youth, (ii) to study the extent to which college youth experience a sense of well-being, and (iii) to study gender differences, if any, in different domains of daily hassles and well-being in the youth.

Methodology: The sample comprised 205 students, of which 120 were males and 85 were females in the age range of 19-20 years. These students were in their final year of graduation, selected from different colleges of Chandigarh. The tools used to collect data included The Daily Hassles Inventory by Grob, Bodmer and Flammer, and the Bernese Questionnaire of Adolescents' Well-being by Grob, Luthi, Kaiser, Flammer, Mackinnon and Wearing. The collected data were treated with mean and percentages.

Major Findings: (1) The college area was perceived to be not really difficult for 70% of males as compared to 56.4% of females and the latter 43.6% perceived college area to be somewhat difficult or very difficult as compared to 30% males. (2) It was found that 80% of the females perceived money matters as not really difficult for them as compared to 55 % of males, whereas more number of males (15.8%) found

this area to be very difficult for them as compared to females (2.4%). (3) In the domain related with girl friends and boy friends it was found that an equal percentage of both males and females were in the category of not really difficult. (4) Regarding the area of health 73.4% males found it not difficult at all for them as compared to 54.2% females. (5) An overall positive sense of well-being and a positive attitude towards life was found in most of the respondents. All the items dealing with the bright side of life, a better future, happiness to live, overall positive attitude towards oneself, were perceived by both males and females. [0639]

COGNITIVE PROCESSES

KUMAR, SURENDER AND SUSUMU, HARIZUKA. 1996. **Metacognition and achievement through cooperative learning.** *The Progress of Education*, Vol. LXX(10), 230-235.

Problem: This study is undertaken to investigate the effectiveness of metacognition and achievement through cooperative learning.

Objective: To study the effectiveness of cooperative learning based approach in terms of academic achievement in mathematics and metacognition of general students as compared with the conventional approach of teaching-learning.

Methodology: The sample of the study comprised 60 students of Grade V and 30 in each of the control group and experimental group were distributed. Learning awareness questionnaire and achievement test were used to collect the data. The collected data were treated with percentages, mean, SD, 't' test and ANOVA.

Major Findings: (1) It was found that there was significant difference between the experimental and control groups' scores at pre-test and post-test stages. (2) It was found that there was positive interaction between the groups for the performance (achievement) of the students. Mean of the achievement scores of control group and experimental group at pre-test stage were not significantly different. (3) It was found that mean learning awareness scores of students differed significantly between the experimental

and control groups at pre-test and post-test stages. (4) It was found that the effectiveness of co-operative learning based approach in the improvement of metacognitive knowledge of the students was more than that of the conventional approach of teaching-learning. [0638]

SEN, A.K. AND SAXENA, PARUL. 1997. **A study on attention with simultaneous presentation of similar and dissimilar tasks.** *Psycho-Lingua*, Vol. 27(1), 11-16.

Problem: The present study attempts to compare the performance of two groups of subjects, differing in age, on task efficiency and division of attention in relation to selective filter of attention.

Objective: To find out the effect of cognitive task as a distracting unit on both cognitive and motor tasks and also the effect of motor task as a distracting unit on both cognitive and motor tasks.

Methodology: The sample of the study consisted of 55 students, both boys and girls, taken from Dayanand Model Secondary School, Delhi. Their age ranged between 10-11 years and 12-13 years and were studying in Classes V and VII, respectively. Cognitive tasks, motor tasks, tracing of circles and rectangles were provided to the students to collect the required data. The collected data were treated with mean, SD and 't' test.

Major Findings: (1) It was observed that when two cognitive tasks were carried out simultaneously, the mean coefficient of division of attention was similar in both the groups and the difference was insignificant. (2) It was found that when two different tasks were done simultaneously, the division of attention was significantly higher in the older group than the younger group of subjects. [0596]

VERMA, B.P. 1997. **Learning style preferences of intellectually gifted adolescents and implications for instruction.** *Journal of Education and Psychology*, Vol. 55(2), 28-38.

Problem: The present study examines whether intellectually gifted adolescents exhibit certain learning style preferences.

Objective: To find out the difference in preference of intellectually gifted adolescents from flexible vs. non-flexible; individualistic vs. non-individualistic; visual vs. aural; field-independent vs. field-dependent; short attention span vs. long attention span; motivation centred vs. motivation non-centred; and environment oriented vs. environment free learning style.

Methodology: Initially 560 subjects of both the sexes studying in Class XI in 14 government senior secondary schools of Delhi were selected by random method. Thereafter, 30 subjects were identified as intellectually gifted on the basis of administration of a verbal test of general mental ability. Tools used to collect the data were the General Mental Ability Test (Hindi version) developed by Joshi and Learning Style Inventory by Agarwal. The collected data were analysed using chi-square

Major Finding: It was found that intellectually gifted adolescents, as a group, had preference for individualistic, flexible, visual, field-independent, long attention span, motivation centred and environment oriented learning styles over non-individualistic, non-flexible, aural, field-dependent, short attention span, motivation non-centred and environment free learning style, respectively. [0555]

MOTIVATION

ANAND, S.P. 1996. **Development of a motivational package to promote teacher effectiveness at primary level.** Independent study. Bhubaneswar: Regional Institute of Education. (DPEP study).

Problem: The study deals with issues related to job-satisfaction of teachers and attempts to motivate teachers in order to work better in primary schools.

Objective: To prepare a motivational package for the primary school teachers in order to enhance their motivation level.

Methodology: The sample of the study comprised 880 teachers of primary classes teaching in nine types of 96 schools which were selected randomly. The tools used to collect data were

school observation record, interview schedule for teachers and a Likert Type Job-satisfaction Scale.

Major Findings: (1) It was found that teachers scored significantly high on the factors of personal considerations and low on working conditions. (2) The teachers' age was negatively related to job-satisfaction. (3) Working conditions emerged as the most significant predictor of job-satisfaction. (4) Teachers teaching in Government Multigrade Schools, Government Primary Schools (rural) and Government Primary Schools (urban) were found to be significantly less dissatisfied as compared to the teachers teaching in Government High Schools in Primary Classes and Government Upper Primary Schools. The teachers teaching in Central, DAVs and privately managed schools were found to be significantly dissatisfied. (5) One-way analysis of variance showed that the type of school in which teachers taught influenced their job-satisfaction. (6) Results showed that teachers of different types of schools differed views on their teaching the children of primary classes. (7) Results showed that Convents held a better perception of their status in the society and it was substantiated by the Central and Multigrade school teachers. [0580]

CREATIVITY AND INNOVATIONS

BANSAL, INDU AND AGARWAL, SHIKHA. 1997. **Role of computers in the enhancement of creativity among young children.** *Psycho-Lingua*, Vol. 27(2), 111-114.

Problem: The present study is an attempt to find out the difference in creative ability of young children of rural and urban community before and after exposure to computers over a period of time.

Objectives: (i) To assess creativity of young children, (ii) to study whether there is any significant difference in the creative thinking of young children as they are exposed to computers over a period of time, and (iii) to study the difference in the creative thinking of rural and urban children and also to identify which of the groups of children is affected more in positive

direction by using computers.

Methodology: The sample of the study comprised 24 children studying in Grades IV and V, belonging to both rural and urban areas, of primary schools of Banasthali Vidyapeeth, Rajasthan. Non-verbal Test of Creative Thinking of Mehdi and Culture Fair Intelligence Test of Cattell were used to collect the data. The data were analysed using mean, SD and 't' test.

Major Findings: (1) It was found that the creative ability improved by the pre-test and post-test scores for the treatment group which was given exposure to computers. (2) It was found that at the initial stage, no significant difference existed in the creative ability of children of rural and urban community, but post-testing increased creative ability of both the groups to a great extent. (3) It was observed that rural group was affected more in positive direction as far as means were concerned but the two groups did not differ significantly when compared post-test. [0626]

BHAWALKAR, SMITA. 1992. **Prediction of scientific creativity through cognitive and affective variables among high school students.** Ph.D., Edu. *Devi Ahilya Vishwavidyalaya*, Guide: Dr. D.N.Sansanwal.

Problem: It studies the importance of identifying scientifically creative students and various associated variables related to cognitive and affective domains.

Objectives: (i) To study the relationship of scientific creativity with self-confidence, tolerance of ambiguity, intelligence, scientific attitude, academic motivation, achievement in mathematics, achievement in science, academic achievement and dependency, separately, (ii) to establish the regression equation for scientific creativity as criterion variable and the ten independent variables, and (iii) to study the effect and various interactions of academic achievement intelligence, risk taking, achievement in mathematics, achievement in science, self-confidence, scientific attitude, dependency, tolerance of ambiguity and academic motivation, on scientific creativity of students.

Methodology: The sample of the study comprised

material (DIM) was found to be effective among the students of flexible time group as well as fixed time group on verbal fluency, verbal flexibility, verbal originality, verbal creativity, non-verbal originality, non-verbal elaboration, non-verbal creativity as well as in developing curiosity. But DIM was not found to be effective in the development of verbal elaboration. Both the groups differed from the control group. (2) The DIM with flexible time was found to facilitate significantly more non-verbal elaboration, non-verbal creativity and curiosity in comparison to fixed time group. (3) The increase in duration of treatment of instructional material with flexible time as well as fixed time developed curiosity equally. But it increased verbal creativity and non-verbal creativity. (4) The students with high self-confidence were found to possess high verbal creativity but it did not influence non-verbal creativity and curiosity. (5) Instructional material with flexible time was found to be best suited to high intelligent students for development of curiosity, but low intelligent students were found to be benefiting from instructional material with flexible time. (6) The popular students were found to possess high verbal as well as non-verbal creativity than isolates but social characteristics did not influence significantly the curiosity of Class VII students. (7) In case of flexible time group, the maximum contribution in predicting verbal creativity was of achievement, and in case of fixed time group, the maximum contribution was of intelligence and achievement. In case of control group, the maximum contribution was of intelligence. (8) In case of flexible time group, the maximum contribution in predicting curiosity was of intelligence and achievement and in case of fixed time group, the maximum contribution was of achievement and intelligence, while in case of control group, the maximum contribution was of self-confidence. [0619]

SHETAY, S.G. 1991. A study of creativity in relation to personality factors of the students from agricultural university. Ph.D., Extn. Edu. Marathwada Agricultural Univ. Guide: Dr. G.G. Nandapurkar.

Problem: The present study was designed to measure creativity of the students studying in

different faculties of the Marathwada Agricultural University

Objectives: (i) To study the socio-personal and economic characteristics of the Agricultural University students, (ii) to classify and analyse the students on the basis of creativity levels, (iii) to find out the differentiating personality traits among the students, (iv) to study the relationship between the creativity of the students and their socio-personal and economic characteristics, and (v) to study the personality factors of students in relation to their creativity.

Methodology: The sample of the study comprised 188 students from three faculties, namely veterinary, agricultural and home science, who were purposively selected. The students were selected through random sampling method. The tools used were Creativity Thinking Test by Mehdi, Socio-economic Status Scale Questionnaires by Kapoor, SES scale developed by Bawazir and Sixteen Personality Factors Questionnaire by Cattell. The collected data were treated with mean, SD, 'Z'-test, correlation and multiple regression.

Major Findings: (1) It was revealed that the sample predominantly comprised of students in the age group between 20-21 years, hailing from middle class, belonging to rural areas, and had medium academic achievement. (2) Majority of the respondents had medium level of creativity followed by low and high levels. (3) The respondents from home science were more reserved and less intelligent than those of other faculties. (4) The respondents from all the faculties did not differ on factors 'C', 'H' and 'Q2' while they significantly differed on factors 'F', 'L' and 'Q3'. (5) It was revealed that the respondents from all the faculties were at par on the factors 'E', 'M' and 'O'. (6) The respondents from agricultural faculty were more conscientious compared to other faculty respondents. (7) The respondents from veterinary and agricultural faculty were dominated by more sensitive nature and were of independent nature being tender on factor 'T'. Similar was the case with factor 'O'. (8) The students from agricultural and veterinary faculty were conservative compared to their counterparts in home science faculty. Similarly they seemed to be superior indicating that they

were more energetic, active and driven than home science respondents. (9) The SES of respondents from agricultural faculty was observed to be significantly and positively related with creativity, while caste, age and area of belongingness could not establish significant relationship with creativity. (10) Male and female respondents did not differ significantly with their creativity level. (11) The variation in the creativity of the respondents from the home science faculty was explained to the extent of 30 % by five variables namely, age, caste, area of belongingness, academic achievement and SES. [0615]

CURRICULUM DEVELOPMENT

Atre, Jayashri and Parasnis, H. 1997. **A critical evaluation of the mathematics teacher's handbook (1992) for Standard IV.** Textbook and Curriculum Research: Annual Research Report 1993-94, 55-58. Pune: Maharashtra State Bureau of Textbook Production and Curriculum Research.

Problem: The present study evaluates the merits and demerits of the mathematics teacher's handbook for Standard IV.

Objectives: (i) To find out how far the year's planning suggested in the handbook is useful to the teachers, (ii) to find out whether the steps in the teaching process recommended in the handbook are well coordinated, (iii) to point out to the Textbook Bureau objectionable statements in the handbook, if any, (iv) to find out whether teachers think that the guidance given to them in the handbook is sufficient, and (v) to assess the originality and usefulness of the handbook.

Methodology: The sample of the study comprised 140 mathematics teachers teaching Standard IV, from 75 schools of Pune Municipal Corporation area. A questionnaire was used to collect the data.

Major Findings: (1) 69% of mathematics teachers of Standard IV, in the city of Pune, were unaware of the mathematics teacher's handbook for Standard IV. (2) Annual planning suggested in the handbook was found useful to teachers.

(3) The handbook did not contain any objectionable statement. (4) The enrichment programme given in the handbook was extremely useful to teachers. (5) A suggestion was made that the handbook should contain some guidance for ensuring reflection of the core elements in the teaching process. [0653]

AWARI, MANISHA AND BHANDARKAR, S. 1997. **A critical study of the Balbharati Marathi textbooks for Standards I to V from the point of view of the ten core areas of the national school curriculum.** Textbook and Curriculum Research: Annual Research Report 1993-94, 27-29. Pune: Maharashtra State Bureau of Textbook Production and Curriculum Research.

Problem: It attempts to find out, through research, whether the ten core elements of the national school curriculum are reflected properly and in the proper proportion in the Balbharati Marathi textbooks for Standards I to V.

Objectives: (i) To make a deep study of the concept of core elements and their content and objectives, (ii) to find out through research, in what way and how far the ten core elements are reflected in the textbooks under study, (iii) to discover deficiencies, if any, in the textbooks, in respect of the reflection of the ten core elements, and (iv) to make suggestions for removing the above mentioned deficiencies from the textbooks under study.

Methodology: The sample of the study comprised 100 persons among whom 80 were school teachers, and the remaining 20 were experts. Among the 80 school teachers, 20 were from 10 Yavatmal Zilla Parishad schools, 20 were from 5 Municipal schools, another 20 were from 10 privately managed schools, 10 were from higher secondary schools and the remaining 10 were retired school teachers. The 20 experts included poets, authors and college teachers. An opinionnaire was used to collect the data.

Major Findings: (1) As the concept of core elements of the curriculum was entirely a novel one, it was necessary to orient the teachers in the matter. (2) Although, apparently all the ten core elements were given their due place in the Balbharati Marathi textbooks for Standards I to V, three core elements, namely, Constitutional

Obligations, Removal of Social Barriers, and Observance of Small Family Norms, were rather neglected in these textbooks. (3) The core element 'Protection of Environment' occurred more often in the textbooks than any other core element. (4) The core elements were better reflected in the content of the lessons, in exercises, and in illustrations than in activities. (5) From the point of view of the core elements, the illustrations in the textbooks were apt ones. (6) The core elements were mostly reflected in the textbooks indirectly, rather than directly. [0645]

BHALWANKAR, V.G. AND VAIDYA, A.K. 1997. A critical evaluation of the Marathi (mother tongue) textbooks for Standards I to V from the point of view of the ten core areas of the national curriculum. Textbook and Curriculum Research: Annual Research Report 1993-94, 32-35. Pune: Maharashtra State Bureau of Textbook Production and Curriculum Research.

Problem: The study tries to evaluate whether the ten core elements of the national curriculum have been given due consideration in preparing the Marathi textbooks.

Objectives: (i) To make an analytical study of the content, illustrations, suggested activities, exercises, etc. of each lesson, in order to find out how far the 'common core elements' are represented in the lesson, (ii) to elicit the opinions of Marathi teachers of Standards I to V regarding the place given to the 10 common core elements in the textbooks under study, (iii) to elicit the opinions of Marathi experts regarding the importance given to the 10 common core areas in the Marathi textbooks for Standards I to V, and (iv) to discover if the 5 textbooks contain anything prejudicial to the values projected in the 10 common core elements.

Methodology: The sample of the study comprised 200 teachers selected from 42 schools, 21 from the Pandharpur taluka and the remaining 21 were from the Malshiras taluka. Of the 200 teachers, only 100 teachers responded. 12 experts of education were also included in the sample. The data were collected through an opinionnaire.

Major Findings: (1) The core area 'Protection of Environment' appeared prominently in the textbook for Standard I. In Standards I and II, emphasis was laid on the description of environment. The 'protection' part appeared later in Standards III to V. (2) The core area 'Observance of Small Family Norms' was not given sufficient attention in any of the 5 textbooks under study. (3) The exercises and activities given at the end of lessons did not reflect the core areas, as they had not been kept in view when the exercises and activities were prepared. (4) In some cases, the opinions of teachers, as expressed by them in the replies to the opinionnaire, differed from the opinion of the researcher arrived at by his own study of the textbook. (5) There was, however, a general agreement between the researcher and the teachers in the sample, as regards the number of times a particular core element had appeared in the textbooks. [0647]

BUTE, S.G. AND KHAN, YUSUF. 1997. A critical evaluation of science teacher's handbook for Standard IV (1992). Textbook and Curriculum Research: Annual Research Report 1993-94, 67-70. Pune: Maharashtra State Bureau of Textbook Production and Curriculum Research.

Problem: The present study critically evaluates the science teacher's handbook for Standard IV and discusses its merits and demerits.

Objectives: (i) To find out whether the science teacher's handbook for Standard IV is prepared according to the science textbook for Standard IV, (ii) to discover the merits and demerits of the handbook, and (iii) to recommend changes in the handbook with a view to making it better and more useful to the teachers.

Methodology: The sample of the study comprised 72 science teachers drawn from 36 Marathi medium schools located in Akola city and 5 experts. Tools used to collect the data included questionnaire and interview schedule.

Major Findings: (1) The cover of the handbook was attractive and the handbook was of the right size (2) Language of the handbook was good and exposition of the subject, logical. (3) There were 13 misprints in the handbook. (4) The information given in the appendix was proper

and useful. (5) The handbook should have contained a list of educational aids, scheme of evaluation, list of references, diagrams and illustrations where needed. [0657]

DESHMUKH, SAROJ AND BARKALE, R.H. 1997. A comparative study of the old and new series of history textbooks for Standards III to V. Textbook and Curriculum Research: Annual Research Report 1993-94, 102-106. Pune: Maharashtra State Bureau of Textbook Production and Curriculum Research.

Problem: This study attempts to compare the strengths and weaknesses of the series of history textbooks of Standards III to V written according to the 1968 syllabus, with those of history textbooks of Standards III to V written according to the 1988 syllabus.

Objectives: (i) To find out the similarities and differences between the old and the new syllabi of history for Standards III to V, (ii) to find out the similarities and differences between the old and the new History textbooks of Standards III to V in respect of objectives, content, exercises, etc., (iii) to study the opinions of history teachers of Standards III to V concerning the old and new history syllabi, and history textbooks of Standards III to V, (iv) to study the opinions of experts regarding the new history syllabus and the new history textbooks of Standards III to V, and (v) to make recommendations for improving the new history textbooks of Standards III to V, in the light of the research done on the project.

Methodology: The sample of the study comprised 60 history teachers who were teaching Marathi history textbooks to Standards III to V. They were selected from the schools located in 8 talukas of Wardha district. The relevant information was gathered by administering an opinionnaire to the 60 teachers and by interview schedule.

Major Findings: (1) The exercises and activities given in the new history textbook of Standard III were found better than those given in the old textbook. (2) In respect of illustrations, graphs, tables, figures, etc. the new history textbook of Standard III was superior to the old textbook. (3) The new history textbook of Standard V was more amenable to the use of teacher aids than the old textbook. (4) The language used in the

new history textbook of Standard III was not found easy enough. (5) It was realized that there was an urgent need of enlightening the teachers on how to use the new history textbooks most effectively. [0667]

DHOK, M.M. AND SUDAME, B.J. 1997. A critical evaluation of the mathematics textbook for Standard IV 1992. Textbook and Curriculum Research: Annual Research Report 1993-94, 52-54. Pune: Maharashtra State Bureau of Textbook Production and Curriculum Research.

Problem: This study discusses the strengths and weaknesses of the mathematics textbook for Standard IV.

Objectives: (i) To find out whether the view-point of the mathematics textbook for Standard IV is the same as that of the mathematics textbooks for Standards I to III, (ii) to find out whether the textbook lays emphasis on the process of self-learning, (iii) to find out whether the textbook makes the process of learning mathematics entertaining and joyful, (iv) to find out whether the textbook is helpful in the formation of mathematical concepts in the minds of pupils, (v) to find out whether the textbook encourages pupils to learn mathematics, and (vi) to find out whether the textbook helps pupils in the achievement of objectives of the mathematics syllabus of Standard IV.

Methodology: The sample of the study comprised 100 teachers and 35 parents who were selected by a composite technique of random and purposeful selection. The sample also included 15 educational experts. The relevant data were collected through a questionnaire.

Major Findings: (1) The textbook was in accordance with the mathematics syllabus for Standard IV. (2) The content of the textbook was correct, up to date, varied and well-arranged. (3) The examples in the textbook were novel, varied and arranged according to the maximum - from simple to complex. (4) The language used in the textbook was easy and appropriate. (5) It was not possible for pupils in rural schools to finish the textbook during one year. [0652]

GARJE, S.P. AND DESHPANDE, L. 1997. A critical evaluation of the general science textbook

for Standard IV. *Textbook and Curriculum Research: Annual Research Report 1993-94*, 64-67. Pune: Maharashtra State Bureau of Textbook Production and Curriculum Research.

Problem: This study tries to evaluate the general science textbook for Standard IV and to discuss its strengths and weaknesses.

Objectives: (i) To find out how far the textbook content is in consonance with the general science syllabus, (ii) to find out how far the textbook content is in accordance with the mental growth, likes and dislikes, and the power of understanding of the Standard IV pupils, and (iii) to find out whether the textbook is written according to the concentric method of organization of learning material.

Methodology: The sample of the study comprised 120 teachers who taught Standard IV, pupils studying in Standard IV and 50 parents of the students of Class IV, who were selected from 100 schools located in Deogad town. The tools used to collect the data included questionnaire and interview schedule.

Major Findings: (1) The content of the textbook was in consonance with the objectives of the primary school science syllabus. (2) Difficult concepts in the syllabus had been properly clarified in the textbook. (3) The language used in the textbook was easy, flowing, attractive and unambiguous. (4) The figures in the textbook were not attractive. (5) The textbook was lacking in suggestive activities that would create a liking for science, foster scientific attitude and promote activities such as observation, collection, clarification, etc. [0656]

GOTKHINDIKAR, PUSHPA AND BARKALE, R.H. 1997. **A critical evaluation of the history textbook (1993) for Standard V.** *Textbook and Curriculum Research: Annual Research Report 1993-94*, 95-98. Pune: Maharashtra State Bureau of Textbook Production and Curriculum Research.

Problem: This study attempts to evaluate critically the history textbook (1993) for Standard V from different points of view and discuss its strengths and weaknesses.

Objectives: (i) To find out if the textbook is helpful

in achieving the objectives of the history syllabus of Standard V, (ii) to find out if the contents of the textbook are within the power of understanding of the pupils of Standard V, and (iii) to make suggestions for improving the history syllabus and textbook of Standard V.

Methodology: The sample of the study comprised 60 history teachers teaching primary and high schools located in urban, rural and adivasi areas of Nasik district. These schools were run by corporation and private managements. The relevant information was gathered using questionnaire and by studying the concerned history textbooks.

Major Findings: (1) All the units of history syllabus of Standard IV were included in the textbook. (2) The contents of the textbook were helpful in achieving the objectives of the syllabus. (3) The illustrations in the textbook made the learning-teaching process easier. (4) The exercises given at the end of lessons were clear and related to the contents of the lessons. (5) The textbook contained 7 flaws and 12 defects. [0665]

GURAV, M.G. AND MALI, M.G. 1997. **A critical evaluation of the Balbharati Marathi textbook for Standard IV (1991).** *Textbook and Curriculum Research: Annual Research Report 1993-94*, 14-17. Pune: Maharashtra State Bureau of Textbook Production and Curriculum Research.

Problem: It attempts to examine the merits and demerits of the Balbharati Marathi textbook for Standard IV in Kolhapur district..

Objectives: (i) To find out whether the textbook is helpful in achieving the objectives of the Marathi (mother tongue) syllabus of Standard IV, (ii) to find out whether the language of the textbook is easy enough for pupils of Standard IV, (iii) to find out if the textbook reflects the values implied in the ten core curricular areas, (iv) to examine the suitability of the exercises given in the textbook, and (v) to find out the opinions of teachers, pupils, and educational experts regarding the merits and demerits of the textbook.

Methodology: A sample of the study comprised

50 students studying in Class IV and 50 teachers drawn from 50 schools (45 schools belonged to rural and the remaining 5 belonged to urban areas) of Radhanagari, Bhudergad and Kagal talukas of Kolhapur district. Ten educational experts were also included in the sample. The tools used to collect data included a questionnaire and an interview schedule.

Major Findings: (1) The textbook was written according to the syllabus. It was helpful in achieving all objectives of the syllabus. (2) The language of the textbook was within the understanding capacity of the pupils of Standard IV. It was suitable to both the urban and the rural pupils. (3) The number of prose and poetry lessons, the grammar portion, and types of literary passages contained in the textbook were in right proportion. The content of the book was such that it created love for reading among the pupils. (4) The exercises given in the textbook were designed to promote activity and self-study on the part of pupils. The illustrations in the textbook were of the right size and in the right place; they were helpful in understanding the content of the lesson. (5) The physical features of the textbook were, in general, satisfactory. [0641]

JADIYAV, MANISHA AND MALI, M.G. 1997. **A critical evaluation of Balbharati Marathi textbook (1991) for Standard IV.** *Textbook and Curriculum Research: Annual Research Report, 1993-94*, 17-21. Pune: Maharashtra State Bureau of Textbook Production and Curriculum Research.

Problem: It attempts to find out the merits and defects of the Balbharati Marathi textbook (1991) for Standard IV, in district Amaravati.

Objectives: (i) To study the physical features of the textbook, (ii) to discuss the merits and demerits of the contents of the textbook, (iii) to find out whether the contents of the textbook are in accordance with the Marathi syllabus for Standard IV, and (iv) to make suggestions for improving the textbook.

Methodology: The sample of the study comprised 118 teachers, 97 persons, 15 subject experts, 15 art experts and 100 pupils. They were selected from the schools located in Amaravati

district. A questionnaire was used to collect the data.

Major Findings: (1) The content of the lessons in the textbook was helpful in achieving the objectives of the syllabus for Marathi. (2) Two lessons were found to be difficult by pupils. (3) The physical features of the textbook were, on the whole, satisfactory. (4) The pictorial illustrations in the textbook were of proper size, conducive to the development of good taste, helpful for understanding the lesson content, useful for making abstract ideas concrete and suitable to the situation described in the lesson. (5) Barring the core element 'India's Common Cultural Heritage', all the other core areas were properly reflected in the textbook. (6) It was suggested that an opera should be included as one of the lessons in the textbook, the poetry lessons in the textbook should be well within the understanding capacity of the pupils and should be amenable to singing, the meaning of difficult words should be given at the end of each lesson, the difficult prose lessons and the difficult poetry lessons should be substituted by other suitable and easy lessons and lastly, the binding of the textbook should be more durable. [0642]

JOSHI, S.P. AND VAIDYA, V.A. 1997. **An investigation into the need of textbooks for teaching 'physical education and health' in Standards VI to VIII.** *Textbook and Curriculum Research: Annual Research Report 1993-94*, 109-112. Pune: Maharashtra State Bureau of Textbook Production and Curriculum Research.

Problem: The present study attempts to assess the need for textbooks for teaching physical education and health in Standards VI to VIII.

Objectives: (i) To make suggestions regarding the nature of the textbooks, if their need is established, (ii) to discuss the possible difficulties in introducing the textbooks, and (iii) to find out if the schools have sufficient teaching aids and apparatus and trained teachers to teach the subject.

Methodology: The sample of the study comprising 75 schools (25 for pilot-study and 50 for main study), was randomly selected from the city of Amaravati. Two questionnaires were

developed and administered to the heads and teachers of the selected schools who taught 'physical education and health' to Standards VI to VIII, to collect the relevant information.

Major Findings: (1) 94% heads of schools and teachers of 'physical education and health' were of the opinion that textbooks were a must for efficient teaching of the subject. (2) 80 % heads of schools felt that there will be no difficulties in the effective use of the textbooks. (3) 64 % heads of schools had opined that all the activities in the syllabus should be given a place in the textbooks. (4) 52 % teachers of 'physical education and health' were of the opinion that all those schools which had all the apparatus and teaching aids must implement the syllabus in 'physical education and health'. (5) 76 % teachers were of the view that the number of periods allotted to 'physical education and health' was quite adequate. [0669]

JOSHI, SNEHA AND PARASNIS, H. 1997. **A critical evaluation of the Balbharati Marathi textbooks for Standards I to V from the point of view of the common core areas of the national school curriculum.** *Textbook and Curriculum Research: Annual Research Report 1993-94*, 24-26. Pune: Maharashtra State Bureau of Textbook Production and Curriculum Research.

Problem: The present study tries to evaluate the Balbharati Marathi textbooks for Standards I to V from the point of view of the common core areas of the national school curriculum.

Objectives: (i) To make a detailed study of the Marathi (mother tongue) textbooks for Standards I to V, (ii) to study the concept of core curriculum and the elements included in the core, (iii) to analyze the content of the textbooks with a view to finding out the core elements reflected in the content, (iv) to find out which of the core elements are not properly reflected in the textbooks, and (v) to suggest remedies for improving the textbooks.

Methodology: The sample of the study consisted 100 teachers from 15 schools. Each of them taught one of the 5 lower primary students. It also included 10 experts. The tool used to collect the data included a questionnaire.

Major Findings: (1) All the 10 elements of the core curriculum were reflected, to a more or less extent, in the Balbharati Marathi (mother tongue) textbooks for Standards I to V. (2) None of the textbooks contained anything prejudicial to any of the 10 core elements. (3) In some textbooks, there were lessons which reflected more than one core elements. (4) Some lessons in the textbooks seemed to be written with the specific purpose of instilling values implied in the core elements. (5) Generally speaking, all the 5 textbooks reflected the values implied in the core elements to a satisfactory extent. [0644]

JOSHI, SULEKHA. 1997. **A comparative study of the current and previous series of history textbooks for Standards III to V.** *Textbook and Curriculum Research: Annual Research Report 1993-94*, 98-102. Pune: Maharashtra State Bureau of Textbook Production and Curriculum Research.

Problem: It attempts to make a comparative study of the current and previous series of history textbooks for Standards III to V with a view to finding out their strengths and weaknesses.

Objectives: (i) To make a comparative study of the philosophical backgrounds of the current and previous courses of study, (ii) to compare the two series of history textbooks from different points of view, using the technique of content analysis, (iii) to survey the opinions of experts and teachers regarding the merits and demerits of the two series of history textbooks, (iv) to find out the opinions of experts and teachers regarding which of the ten core elements of the National Curriculum Framework are reflected in the current and previous series of history textbooks, and to what extent, and (v) to make recommendations for improving the current series of history textbooks, on the basis of findings and conclusions arrived at through research.

Methodology: The sample of the study comprised 10 experts, 2 men and 8 women. (9 M.A., M.Ed. and 1 M.A., M.Ed., Ph.D.) and 47 teachers, of whom 22 taught Standard III, 13 taught Standard IV, and the remaining 12 taught Standard V. The relevant history textbooks were studied and opinionnaire were used to collect

the data.

Major Findings: (1) The previous history textbook of Standard III was found superior to its current counterpart, in respect of patriotic altitude, inculcation of values, and interest. (2) In respect of reflection of the 10 core elements of the National Curriculum Framework, the present and previous history textbooks of Standard IV were more or less on the same level. (3) In respect of individual and social content, the previous history textbook of Standard V was found superior to its present counterpart. (4) History teachers were of the opinion that, in general, the present history textbook series of Standards III to V was superior to the previous one. (5) According to experts, the present history textbooks of Standards IV and V were found superior to their previous counterparts but in respect of Standard III the previous history book was superior to the present one. [0666]

KENI, SHEETAL AND SHIVANEKAR, V. 1997. **A critical evaluation of science teacher's handbook for Standard IV (1992).** *Textbook and Curriculum Research: Annual Research Report, 1993-94*, Pune: Maharashtra State Baureau of Textbook Production and Curriculum Research.

Problem: This study critically evaluates the science teacher's handbook and examines the practicability of the suggestions made in the handbook.

Objectives: (i) To find out how far the handbook fulfils the teachers' need of enrichment of subject matter to that given in the science textbook, (ii) to find out how far the experiments and activities suggested in the handbook help the teacher in explaining the textbook content to the pupils, (iii) to find out how far the handbook helps the teachers in solving problems faced by them in teaching science, and (iv) to make suggestions for improving the handbook, with a view to making it more useful to science teachers.

Methodology: The sample of the study comprised 45 teachers from 12 Marathi schools located in Sion, Dadar and Parel. From the 12 schools, 10 were privately managed but government recognized schools and 2 were managed by the Mumbai Municipal Corporation. Questionnaire and interview schedule were used as tools to

collect the data.

Major Findings: (1) The handbook provided the teachers with additional information concerning 36 teaching points in the textbook. (2) Out of the 27 activities suggested in the handbook, 21 activities were such that they could be easily carried out by the pupils, and were helpful in explaining the textbook content. (3) The handbook helped the teachers in clearing doubts in the minds of pupils regarding 31 teaching points. (4) The explanation given in the handbook regarding 8 teaching points was insufficient. (5) Generally speaking, the handbook was fairly successful in supplying teachers with the additional information needed by them. [0658]

KULKARNI, PUSHPA AND MALI, M.G. 1997. **Evaluation of teacher's handbook 'Art' of Standard III (1992).** *Textbook and Curriculum Research: Annual Research Report 1993-94*, 116-119. Pune: Maharashtra State Bureau of Textbook Production and Curriculum Research.

Problem: The present study attempts to evaluate the teacher's handbook 'Art' of Standard III (1992).

Objectives: (i) To find out the availability of teacher's handbook, (ii) to promote teachers to make use of teacher's handbook, and (iii) to make recommendations to improve the teacher's handbook.

Methodology: The sample of the study included 82 teachers, 42 headmasters and 11 experts who were drawn from 104 schools located in Satara district of Maharashtra. A questionnaire was developed to collect the information.

Major Findings: (1) It was found that teachers did not use the handbook for teaching 'Art' subject. (2) No separate orientation courses for teaching 'Art' were organized by schools or by the Government. Art teachers were trained only in 'drawing' and not in the other subjects in the Art curriculum. (3) So far as the music (vocal and instrumental) part was concerned, the content matter was satisfactory and was in easy language. However, some pictures of Indian musical instruments given in the textbook could not be identified by students. (4) It was felt that

the content matter and the concepts mentioned in the 'Drama' chapter needed more explanation. The students did not like lengthy dramas. (5) It was recommended that 'Dance' movements should be illustrated with the help of pictures/figures. (6) It was felt that the content matter in the second chapter 'Painting, Drawing, Sculpture' was fluent and easy. (7) A few recommendations were also given. [0671]

PARAB, K.S. AND AJGAONKAR, V. 1997. **A critical evaluation of the history textbook (1993) for Standard V.** *Textbook and Curriculum Research: Annual Research Report 1993-94*, 92-95. Pune: Maharashtra State Bureau of Textbook Production and Curriculum Research.

Problem: The present study attempts to review the history textbook for Standard V from various points of view and to discover its strengths and weaknesses.

Objectives: (i) To review the textbook from the point of view of the history syllabus for Standard V and the 10 core elements of the national curriculum, (ii) to find out whether the content of the textbook is within the power of understanding of the Standard V pupils, (iii) to find out whether exercises given at the end of lessons are appropriate and sufficient, and (iv) to make necessary suggestions for improving the textbook.

Methodology: The sample of the study comprised 20 schools having diverse economic, social and educational environments situated in Greater Mumbai Municipal Corporation. 100 morning and evening divisions (50 each) of Standard V were selected from these 20 schools. 100 history teachers were selected to administer a questionnaire and to discuss responses to the questionnaire. From one of the 100 classes, the remaining 20 parents and 20 pupils were interviewed.

Major Findings: (1) The size of the textbook was proper and the quality of paper and printing was of a high standard. (2) The front cover and back cover were not meaningful and appropriate to the content of the textbook. (3) The language of the textbook was easy enough for the Standard V pupils. (4) The illustrations in the textbook were not coloured and attractive. (5) There was

no variety in the exercises given at the end of lessons. (6) The contents of the textbook were accurate. (7) Many a suggestions were offered to improve the quality of the history textbook. [0664]

PATEL, J.K. 1997. **A critical evaluation of Balbharati Urdu textbook (1991) and the teacher's handbook.** *Textbook and Curriculum Research: Annual Research Report, 1993-1994*, 43-45. Pune: Maharashtra State Bureau of Textbook Production and Curriculum Research.

Problem: This study tries to critically evaluate the Urdu textbook for mother tongue from various angles.

Objectives: (1) To study the physical features of the textbook, (ii) to evaluate whether the ten core elements have been reflected in the textbook, (iii) to evaluate the exercises in the textbook, (iv) to evaluate whether the textbook fulfils the aims and objectives of teaching Urdu as a first language, (v) to evaluate the general standard of the lessons in the textbook and their relevance to the mental ability of students, and (vi) to evaluate the teacher's handbook based on Balbharati Urdu Standard III.

Methodology: The sample comprised 50 primary schools from the Nagar Parishad and Zilla Parishad. Some private schools were also included in the sample. The relevant data were collected using a questionnaire.

Major Findings: (1) The textbook was according to the syllabus approved by the Government of Maharashtra. (2) The lessons included in the textbook were good ones, especially the lessons based on historical facts and science were ideal. (3) Language of the lessons was easy and clear. (4) The pictures in the textbook were nice and relevant to the content matter. (5) The teacher's handbook was not known to the teachers and it was not easily available. The syllabus was also not available. (6) Most of the core elements mentioned in the syllabus had been reflected in the textbook. [0650]

ROKDE, Y.R. 1997. **A critical evaluation of the mathematics textbook for Standard IV.** *Textbook and Curriculum Research: Annual*

Research Report 1993-94, 48-51. Pune: Maharashtra State Bureau of Textbook Production and Curriculum Research.

Problem: This study attempts to evaluate the strengths and weaknesses of the mathematics textbook for Standard IV and to make suitable suggestions for improvement of the textbook.

Objectives: (i) To find out whether the contents of the textbook are in accordance with the mathematics syllabus for Standard IV, (ii) to find out whether the textbook is helpful in the achievement of the objectives of teaching mathematics in Standard IV, (iii) to evaluate the contents and physical features of the textbook, (iv) to discover the merits and demerits of the textbook as regards its language, figures, exercises, etc., and (v) to make suggestions for improvement of the textbook.

Methodology: The sample of the study comprised 100 teachers teaching mathematics to Standard IV and 20 parents of students studying in Standard IV. Of these 100 teachers, 55 were from municipal schools and 45 were from schools under private management. The tools used to collect data included interview schedule and questionnaire.

Major Findings: (1) The objectives of the mathematics syllabus for primary schools were fully reflected in the mathematics textbook of Standard IV. (2) The 'one page - one concept' format adopted in the textbook for explaining mathematical concepts made the subject easy for students. (3) The exercises for self-study given in the textbook were of proper type and were sufficient in number. (4) It would have been better, if at the end of each of the four parts of the textbook, there had been a summary under the heading 'What have we learnt in this part?' (5) The binding of the textbook was not sufficiently strong and durable. (6) Suggestions were also made for the improvement of the textbook. [0651]

SAVANT, N.N. AND BARKALE, R.H. 1997. **A critical evaluation of history textbook for Standard V.** *Textbook and Curriculum Research: Annual Research Report 1993-94*, 89-92. Pune: Maharashtra State Bureau of Textbook Production and Curriculum Research.

Problem: The present study tries to examine whether the history textbook of Standard V is in accordance with the history syllabus of Standard V.

Objectives: (i) To analyse the textbook with a view to finding out whether it is helpful for achieving objectives of the syllabus, (ii) to analyse the textbook in order to find out if it is conducive to the learning outcomes mentioned in the syllabus, (iii) to find out whether the language, concepts, and technical terms used in the textbook are within the power of understanding of the pupils of Standard V, (iv) to find out whether the exercises given in the textbook are sufficient and in accordance with the syllabus objectives, (v) to evaluate physical features of the textbook such as cover, quality of paper, price, etc., and (vi) to make suggestions for improving the textbook.

Methodology: The sample consisted 45 schools selected from Satara city through random sampling technique. From these schools, one teacher from each school teaching history to Class V, was selected. The sample also included 10 educational experts; 3 of them were teachers in colleges of education, 2 were extension officers, 3 were teachers in Arts colleges and the remaining 2 were experienced teachers in high schools. The tools used to collect the data included questionnaire and interview schedule.

Major Findings: (1) The front cover and the back cover were both excellent, meaningful, and suitable to the content of the textbook. (2) The binding of the textbook was not strong enough. (3) All units of the syllabus were included in the textbook. (4) The textbook was fairly helpful for achieving the objectives of the history syllabus of Standard V. (5) There was nothing in the textbook content, that would be harmful to the unity and integrity of the nation. [0663]

SHAIKH, H.M. AND SONAVNE, S.M. 1997. **A critical study of the need and nature of textbooks for teaching physical education and health at the higher primary stage.** *Textbook and Curriculum Research: Annual Research Report 1993-94*, 112-116. Pune: Maharashtra State Bureau of Textbook Production and Curriculum Research.

Problem: The present study attempts to make a

critical study of the need and nature of standard-wise textbooks for teaching 'physical education and health' in Standards VI to VIII at the higher primary stage.

Objectives: (i) To survey the opinions of educational experts, heads of schools, teachers and pupils, on the need and nature of standard-wise textbooks for teaching 'physical education and health' in Standards VI to VIII of the higher primary stage, (ii) to make lists of items for inclusion in the proposed textbooks, (iii) to find out whether the teachers will be able to teach 'physical education and health' efficiently with the help of proposed textbooks, (iv) to find out whether schools have the educational aids and apparatus needed for teaching physical education and health at the higher primary stage, and (v) to prepare a list of extra-curricular and co-curricular activities useful for the learning and teaching of physical education and health.

Methodology: The sample of the study comprising 102 heads of schools, 200 teachers teaching physical education and health at the higher primary stage and 100 teachers teaching other subjects to Standards VI to VIII, was drawn from all types of 102 schools of Nanded district located in urban and rural areas. The information was collected through questionnaire and interview schedule.

Major Findings: (1) It was found that the position of teaching 'physical education and health' at the higher primary stage was quite unsatisfactory. (2) The teachers of 'physical education and health' did not receive up-to-date training in the teaching of the subject. (3) Generally, schools were lacking in the aids and apparatus required for teaching 'physical education and health'. (4) The teacher's handbooks prepared standard-wise for the teaching of physical education and health were not made available to the concerned teachers. (5) Generally, games were allotted two periods in a week. That time was insufficient. [0670]

WAKDE, S.A. 1997. **A critical study of the Balbharati Marathi textbooks for Standards I to V from the point of view of the ten common core areas of the national school curriculum.** *Textbook and Curriculum Research: Annual Research Report 1993-94*, 29-32. Pune:

Maharashtra State Bureau of Textbook Production and Curriculum Research.

Problem: It attempts to find out how far and in what way the 10 core elements suggested in the national school curriculum are reflected in the Balbharati Marathi textbooks for Standards I to V.

Objectives: (i) To find out which of the 10 core elements are reflected in the textbooks and to what extent they are reflected, (ii) to note down where, in the lessons, the core elements are reflected in the lesson content, in the illustrations, in the exercises or in the suggested activities, and (iii) to suggest changes in the textbooks, with a view to ensuring the reflection of the 10 core elements in the right manner and to the right extent.

Methodology: The sample comprised 100 teachers (70 males and 30 females) of which 20 teachers were teaching in Standard I, 20 in Standard II, 20 in Standard III, 20 in Standard IV, and 20 in Standard V. The sample also included 10 experts. The data were collected through questionnaire and opinionnaire.

Major Findings: (1) In the textbook for Standard I, the Core Element No. 7 was the most reflected core element, while Core Element No.5 was the least reflected. (2) In the textbook for Standard II, the Core Element No. 1 was reflected indirectly, but fully through illustrations. (3) If all the 5 textbooks for Standards I to V and all the 10 core elements were taken into consideration collectively, it was felt that the core elements were reflected fully in the content of the lessons and in illustrations; while in exercises and activities, they were reflected only to a small extent. (4) In the textbook for Standard IV, the core element 'Inculcation of Scientific Temper' was reflected in lessons numbered 3 and 10. (5) The core element 'India's Common Cultural Heritage' was reflected in the textbook for Standard III, in lessons numbered 2, 3 and 15. [0646]

PRE-PRIMARY EDUCATION

DUHAN, K. AND PUNIA, SAKUNTALA. 1997. **Language performance among pre-schoolers.** *Psycho-*

Problem: The present study attempts to assess the language performance of pre-schoolers.

Objective: To study the existing level of language comprehension and expression of children between 3-4 years of age.

Methodology: The sample of the study comprised 30 children, 15 each from the laboratory nursery school, Department of Child Development, College of Home Science, CSS Haryana Agricultural University, Hissar and Bal Bhawan. Their age ranged from 3 1/2 years with + - 2 months. Revised Reynell Language Developmental Scale was used to collect the data. The data were analysed statistically by using mean and SD.

Major Findings: (1) Children had their language performance below average. (2) The environment provided at school or home was not conducive for language development. Performance on comprehension and expressive aspects was very poor. (3) It was found that children were not exposed to variety of activities or materials which could help them in their development. Even activities like story telling or poem recitation were not regularly performed which help in expressive aspects of language. (4) Teaching aids were not prepared and used by any teacher. (5) None of the teachers was self motivated but worked under compulsion and did not take initiative in performing activities. (6) None of the teachers narrated stories but a majority recited poems/rhymes frequently. No one encouraged individual child to narrate events and other activities for language development. [0623]

KOTHARI, S. 1996. **Vitamin 'A' status of pre-school children in selected tribal areas of Udaipur.** Ph.D., Home Sc. Rajasthan Agricultural Univ. Guide: Prof. S. Mathews.

Problem: This study deals with the prevalence of Vitamin 'A' deficiency among tribal pre-school children living in relatively remote and inaccessible areas around Udaipur in the state of Rajasthan.

Objectives: (i) To study the dietary intake with reference to sources and amount of vitamin 'A', (ii) to establish relationship of vitamin 'A'

deficiency with the socio-economic factors, (iii) to assess the prevalence rate of vitamin 'A' deficiency symptoms while studying the clinical signs, (iv) to find out relationship between xerophthalmia and various grades of protein energy malnutrition, and (v) to determine the impact of vitamin 'A' solution administration amongst clinically deficient children.

Methodology: The sample of the study comprised 1000 tribal children aged 2 to 6 years who were selected at random from 12 villages of Girwa Panchayat Samiti of Udaipur (Raj). The tools used to collect data were Dietary Schedule, Diet Survey, Nutrition Assessment Schedule and clinical examination for vitamin 'A' of pre-school children. The collected data were treated with percentage, chi-square, mean, median, SD, and 't' test.

Major Findings: (1) Out of 1000 pre-school children, 218 children were found to be suffering from one or other deficiency signs of vitamin 'A'. (2) As regards the spectrum of vitamin 'A' deficiency, 69.72% had night blindness, 18.35% conjunctival xerosis, 9.63% bitot's spots, 1.38% corneal xerosis and 0.92% suffered from serious manifestations like corneal ulceration, out of the total 218 vitamin 'A' deficient children. (3) Data on socio-economic factors revealed that children belonging to nuclear families, more family members in the family, lower birth order, lower economic level, low literacy level, major occupation of father being cultivation, mothers who were housewives and not contributing to family income had significantly higher number of vitamin 'A' deficient children as compared to joint family, small family size, higher birth order, higher income level, higher economic level, high literacy level, service class or round the year occupation and mothers who were contributing to family income. (4) The incidence of vitamin 'A' deficiency was found significantly associated with increase in the degree of protein energy malnutrition in case of males but it was higher but non-significant in case of females. (5) Daily mean intake of all the nutrients was less than Recommended Dietary Allowances given by I.C.M.R. (6) The mean dietary intake of sub sample of 100 children was assessed by weightment method and their intake of nutrients was found to be significantly lower for protein, calcium, iron, carotene and riboflavin, while it

was non significant for calories, thiamin and niacin as compared to Recommended Dietary Allowances (RDA). (7) The mean intake of carotene was only 411 among vitamin 'A' deficient children which was about 1/4th of the RDA. (8) Twenty two children out of the sub-sample of 100 children, who were suffering with vitamin 'A' deficiency, were subjected to intervention therapy with vitamin 'A' solution. [0558]

PRIMARY EDUCATION

AGRAWAL, REENA. 1997. A comparative study of concept of conservation of continuous quantities in primary level students of English and Hindi medium schools. Indian Journal of Educational Research, Vol. 16(2), 27-31.

Problem: This study attempts to compare the concept of conservation of continuous quantities in primary level students of English and Hindi medium schools.

Objectives: (i) To examine the concept of conservation of continuous quantities in elementary school children, and (ii) to examine the relationship between the medium of instruction and age of attainment of concept of conservation of continuous quantities.

Methodology: The sample of the study comprised 320 students (160 each from Hindi and English medium schools) selected randomly from four schools of Lucknow city, viz. Bal Vidya Mandir, Charbagh, Rani Laxmi Bai Memorial School, St. Paul's School and Spring Dale School. The age of the students ranged from 4-11 years. The tools used to collect data included Test of Conservation of Continuous Quantities Involving Liquid by Piaget and Szeminska and Clay by Piaget and Inhelder. The collected data were treated with percentages.

Major Findings: (1) It was found that the concept of conservation of continuous quantities (liquid and clay) developed through the same three stages in Indian children as described by Piaget. Therefore, there existed conservation of continuous quantities in Indian children. (2) It was found that with succeeding stages the

median age also increased, both among Hindi and English medium school students. This justifies that the concept of continuous quantities develops through invariant sequence of stages. (3) It was indicated that the students of Hindi medium schools showed a lag in the age of accession attained at each stage as compared to the subjects of English medium schools. [0682]

DAS, P.K. 1996. Formulation of intervention strategies for effective management of large size classes at elementary level. Independent study. Bhubaneswar: Regional Institute of Education. (DPEP study).

Problem: This study addresses the problem of transacting lessons effectively in large size classes.

Objectives: (i) To identify the schools with large class-size where pupils' achievement in mathematics and language is high, (ii) to observe, identify and document the good teaching practices in high achieving schools as compared to low achieving schools of large class-size, (iii) to develop intervention strategies on the basis of identified and documented good practices followed in high achieving schools, and (iv) to try out intervention strategies in sampled low achieving schools.

Methodology: Twenty schools with class strength more than 50 students (large size) participated in the study. The tool and technique used was observation schedule.

Major Findings: (1) There was an overall improvement of pupils' achievement after the administration of intervening strategies in all the five low achieving schools. (2) With regards to sustainability and replicability of these strategies, it was found from the field experience, by judging the pupils' as well as teachers' participation in the process, that five strategies, i.e., alteration in learner's location, partner shuffling, monitorial assistance, co-operative learning and self-learning were the most effective intervening strategies to promote low achieving schools of large size-classes. (3) These five strategies were found to (a) be immediately accepted by the teachers and pupils because of their easy manoeuvrability, (b) create curiosity

among the pupils, (c) motivate slow learners and back benchers to come to the forefront, (d) encourage student-student learning, (e) inculcate child centred learning in place of teacher directed learning, and (f) be less tedious and more joyful in its accomplishment. [0578]

DONGARE, U.B. AND KOLPE, B.A. 1997. **An investigation into the adequacy of the number of periods allotted to mathematics in the primary school syllabus for Standards I to V.** *Textbook and Curriculum Research: Annual Research Report 1993-94*, 125-128. Pune: Maharashtra State Bureau of Textbook Production and Curriculum Research.

Problem: The present study makes an investigation to find out whether the number of periods allotted to mathematics in the primary school syllabus are adequate or not.

Objectives: (i) To study the priority and number of periods given to the different subjects included in the primary school syllabus for Standards I to V, (ii) to study the problems of mathematics teachers of Standards I to V, in connection with the school time-table, (iii) to find out whether it is possible to achieve the objectives of teaching mathematics in Standards I to V, within the periods allotted to the subject in the time-table, (iv) to make a comparative study of the time-tables followed in one-teacher, two-teacher, rural, and urban schools, in Standards I to V, and (v) to study the adequacy of periods allotted to different units in mathematics by observing experimental teaching.

Methodology: The sample of the study comprised 35 schools of district Satara. It included 5 one-teacher schools, 5 two-teacher schools, 5 rural primary schools, 5 urban primary schools, 5 privately managed primary schools, 5 higher primary schools and 5 lower secondary schools. The tools used in the study included questionnaire and interview schedule.

Major Findings: (1) 90% of schools prepared their time-table, taking it for granted that there would be about 5% deviation from them. (2) 100% teachers were of the opinion that the number of periods allotted to mathematics was not adequate. (3) 50% teachers completed the mathematics syllabus by using some periods

allotted to other subjects, while the remaining 50% did so by taking extra periods. (4) 100 % heads of schools stated that assistant teachers discussed with them their difficulties concerning the completion of the syllabus. (5) It is essential that the mathematics teachers make a studied use of the teacher's handbook along with the mathematics textbook. [0673]

GUPTA, I.D. SHARMA, K.R. AND MALVIYA, R. 1996. **Development and field testing of competency based teaching learning strategies and materials suitable for primary schools with two teachers teaching in multigrade setting.** Independent study. Bhopal: Regional Institute of Education. (DPEP study).

Problem: The study attempts to develop field test competency based strategies and materials suitable for primary schools with two teachers teaching in multigrade setting.

Objectives: (i) To reformulate competency based strategies designed earlier in a manner and style that practising teachers prefer, (ii) to validate empirically the acceptability and usability of the proposed strategies and materials by practising teachers, and (iii) to assess the effectiveness of the proposed strategies and materials in terms of students' participation and attainment.

Methodology: The sample of the study comprised nine teachers selected from primary schools in one cluster of Dhar block of Dhar district in Madhya Pradesh. The tools used to collect data included attainment test for Grades I, II, III, IV and V, competency teaching plan for multigrades, observation schedule and an opinionnaire. The collected data were subjected to qualitative and quantitative analysis.

Major Findings: (1) The school profile presented a sad tale as regards the effects of *Shikshak Samakhya*, availability and filling up of vacant posts of teachers. (2) Most of the teachers teaching in multigrade setting did not have any pre-service training. (3) The teachers felt the need for psychological continuity in class distribution. (4) The teachers were not accustomed to use the blackboard. (5) Teachers were not concerned about curriculum organization strategies and time-table strategy for enhancing students' participation. (6) Group

remained at 46% only. [0590]

Prakash S.; Potdar, M.V.; Singh, V.P.; Oberoi, K.; Tiwari, R.S. and Gupta, J. 1996. **Identification of local specific teaching learning materials for Grades I, II and III in language, mathematics and environmental studies to nurture perceptual abilities including observation, measurement and drawing inferences.** Independent study. Bhopal: Regional Institute of Education. (DPEP study).

Problem: This study aims to identify local specific materials to make teaching-learning process effective.

Objectives: (i) To identify local specific materials pertaining to language, EVS, mathematics and school activities which are available and being used at the primary level in DPEP districts of Madhya Pradesh and Maharashtra, and (ii) to suggest the use of suitable materials in the teaching of various topics contained in the primary syllabi.

Methodology: A large number of schools of two districts, namely Raisen (Madhya Pradesh) and Osmanabad (Maharashtra) were selected for the study. Observation proforma, some poems and tests on language, EVS and mathematics were developed and used to collect data. Interaction with teachers and guardians was also made.

Major Finding: The study identified various local specific materials in the two sample districts of Raisen and Osmanabad. [0591]

Rath, K.B.; Alam, S.; Anand, V. and Kumar, Rajesh. 1996. **Effect of schooling process on learning outcome.** Independent study. Ajmer: Regional Institute of Education. (DPEP study).

Problem: This study tries to assess the effect of schooling process on learning outcome.

Objectives: (i) To identify the effect of schooling process variables on learning outcome at primary stage, and (ii) to determine the schooling process variables that promote equity in the school.

Methodology: The sample of the study comprised 96 head teachers, 408 teachers and 1882

students of Grade V drawn from 100 schools of Hissar District of Haryana. Stratified proportionate random sampling technique was used to select the schools. The tools used to collect the data included pupil schedule, school schedule, teacher schedule, head teacher schedule, Raven's Coloured Progressive Matrices, Achievement Test in Language and Mathematics, Intellectual Achievement Responsibility Questionnaire, self-esteem inventory and metacognition questionnaire. The data collected were treated through HLM analysis.

Major Findings: (1) There were 29% and 20 % variance across the school of mathematics and language, respectively whereas for self-esteem and attribution process, it was 10 and 12 respectively. (2) Within the school, girls' performance in mathematics and language was not different from boys'. However, it was not consistent across the school in mathematics. (3) Students of BC category were performing lower in mathematics and language than general students within the school but varied significantly across the school in mathematics only. SC students' performance was less than general students in mathematics within the school. They had lower self-esteem than general students within the school but not consistent across the schools. Metacognitive awareness of students appeared as a significant determinant of mathematics and language achievement and their self-esteem within the school. Family environment and general ability of students were also found as significant predictor studied outcomes at pupil level. (5) Family environment of students was found to have substantial effect on mathematics and language achievement at school level as a contextual variable. (6) On an average, schools with better mathematics achievement also had better language achievement. (7) At the school level, attribution process was strongly related to mathematics achievement whereas self-esteem was with language achievement. (8) Pupil's perception about their teachers, head-teachers' cooperation to teacher in the management of academic matters, pupils' inclination towards teacher had discernible effect on mathematics achievement of students whereas mathematics' qualifications of teachers had negative impact on the same outcome. (9) Percentage of female teachers pupil

inclination towards teacher, instructional approach in classroom, head-teachers concern for students significantly influenced the language achievement. (10) Class size, students' preference to work in groups, sequential presentation of lesson with comprehensible language and instructional approach in classroom improved the self-esteem of students substantially, whereas closeness among teachers negatively influenced the self-esteem (11) Head-teacher's cooperation to teachers in the management of academic matters and group feeling among students attributed positively towards the attribution process of students. [0592]

RAWOOL, SATYAVATI. 1997. A study of usefulness of the notes of teacher-pupil interactions that take place during the teaching learning process of science and mathematics. Textbook and Curriculum Research: Annual Research Report 1993-94, 83-86. Pune: Maharashtra State Bureau of Textbook Production and Curriculum Research.

Problem: The present study tries to assess the usefulness of the notes of teacher-pupil interactions that take place during the learning-teaching of concepts in science and mathematics.

Objectives: (i) To prepare, with the help of psychological principles, a lesson plan for the formation and development of principles, that will be useful to both the pupils and the teacher, (ii) to examine the usefulness of teacher-pupil interaction notes in the lesson plans, from the point of view of the teacher and pupils, (iii) to make useful suggestions for preparing a textbook for self-learning by pupils, (iv) to make suggestions for increasing the usefulness of science and mathematics textbooks and teacher's handbooks, and (v) to suggest topics for discussion in the orientation courses and in-service training courses for science and mathematics teachers.

Methodology: The sample of the study comprised 39 science and mathematics teachers. Out of them, 20 teachers taught science and mathematics to Class V and 19 teachers taught science and mathematics to Class VI. The researcher gathered the information from the

literature concerning the formation and development of concepts in the minds of the pupils, the principle laid down by Piaget, and the interactions that took place between teacher and pupils.

Major Findings: (1) It was noticeable that at present, the skill of listening with understanding was not developed to the proper extent in the primary school pupils. (2) Pupils were not able to explain the cause and effect relationship in any process, since no such explanation was asked for in the examination. (3) Teacher-educators were of the opinion that if the principle of 'learning at one's own speed' was followed in schools, it will not be possible to complete the syllabus in the stipulated time. (4) Teachers thought that the language in which the researcher had recorded teacher pupil interactions was rather difficult. (5) The present textbooks in science and mathematics did not encourage pupils to think independently. [0662]

TEKALE, R.V. 1997. A critical study of the school time-table with respect to science (Standards III to V). Textbook and Curriculum Research: Annual Research Report 1993-94, 128-130. Pune: Maharashtra State Bureau of Textbook Production and Curriculum Research.

Problem: The present study attempts to examine critically the school time-table with respect to science for Standards III to V.

Objectives: (i) To observe whether the periods allotted in the syllabus for teaching science to Standards III to V are sufficient in practice, (ii) to study priority given to science subject in the different school textbooks, (iii) to assess distribution of the portion in the textbooks and the units according to the periods given, and (iv) to suggest some models, activities, tips for carrying out experiments in the class, guidelines for using teaching aids and-units for self-study of students.

Methodology: The sample of the study comprised 20 primary schools of Classes III to V. The sample were drawn from Aurangabad city. Tools used to collect the data included questionnaire and interview schedule.

Major Findings: (1) The teachers and headmasters had not studied the revised

primary school curriculum (1988). There was absolutely no scheme or no planning with the teachers to implement effectively the new curriculum (especially, teaching of science). (2) According to 69% primary teachers, science was taught in the first half of the school day, i.e., place given to science periods was in the first 3-4 periods of the time-table. (3) Unit planning and the yearly planning was done in the schools. The teachers got 69 periods in a year, according to the syllabus, which was not sufficient for the teaching of science. (4) Teacher's handbooks were useful, but only 25% teachers made use of teacher's handbooks. The periods allotted for science teaching were not sufficient, even though they taught according to the instructions given in teacher's handbooks. (5) The syllabus of science for Standards III to IV was not suitable to the age-group of students. The number of lessons in the textbooks were also more. However, according to the opinions expressed by the students, they liked science subject. One of the striking opinions of students was that daily periods commenced on time but the teachers did not come to the class on time; and even if they came, they did the work of checking notebooks or any other work instead of teaching. They never used teaching aids while teaching science. [0674]

SECONDARY EDUCATION

BABU, R. 1997. **A study of commerce education in higher secondary schools in Tamil Nadu.** Ph.D., Edu. Annamalai Univ. Guide: Dr. A Selvaraj Gnanaguru.

Problem: This study attempts to evaluate the commerce education at the higher secondary level of Tamil Nadu.

Objectives: (i) To evaluate the commerce textbooks prescribed for higher secondary schools in Tamil Nadu, (ii) to analyse the question papers in commerce used in higher secondary schools, (iii) to assess the effectiveness of commerce teachers in teaching commerce at the higher secondary level, (iv) to measure the level of teachers' job involvement in teaching commerce at the higher secondary level, (v) to study the attitude of the students

towards the study of commerce, (vi) to evaluate the students' achievement in commerce, and (vii) to analyse students' occupational aspirations.

Methodology: The sample of the study comprised 452 students and 288 commerce teachers from higher secondary schools of Tamil Nadu. They were selected through multi stage random sampling technique. The tools used to collect the data were Scale for Textbook Analysis, Teachers' Effectiveness Inventory, Teachers' Job Involvement Inventory and Students' Attitude Towards the Study of Commerce by the investigator. The collected data were treated using descriptive and inferential statistics.

Major Findings: (1) The commerce textbooks prescribed for the higher secondary classes were not satisfactory. (2) Question papers set for terminal examinations had scope for improvement along with weightages given to objectives. (3) The commerce teachers were found to be fairly effective in their teaching, especially those who had research experience and their job involvement was good. (4) Commerce teachers in urban schools showed greater involvement as compared to their rural counterparts. (5) Students' achievement in commerce and their attitude towards study of commerce was found to be positive and significant. (6) Commerce teachers' effectiveness and their job-involvement was found to be positive and significant. [0545]

KAUR, KANWALJIT AND GOYAL, GEETA. 1997. **Academic aspirations of rural tenth class girls.** *Trends in Education*, Vol. XXXII(1), 18-28.

Problem: This study makes an attempt to study the academic aspirations of Class X rural girls.

Objectives: (i) To determine the factors related to the academic aspirations of rural X Class girls, and (ii) to find out the association between socio-personal characteristics and academic aspirations.

Methodology: The sample of the study comprised 276 girl students of Class X from Faridkot district of Punjab. The schools were selected randomly. A questionnaire was developed to

collect the data for the study. The collected data were treated with mean, SD, 't' test, chi-square and percentages.

Major Findings: (1) Majority of the students had low academic performance, were born later in order of birth, belonged to high caste and nuclear families. About 77.65 % belonged to large families and high income family group. The mothers of the respondents had low education and were housewives, while the fathers had medium and low education and were agriculturists. Majority of the respondents belonged to the medium socio-economic status category. (2) It revealed that 76.86 % students wanted to continue their studies. Almost equal percentages—12.16 % and 10.20 %—wanted to stay at home or join some service. There was a negligible percentage of students who planned to get married and settle in life. (3) As regards choice of specific areas of study under degree programmes, it was found that the first three ranks of the area of study under the degree programme were occupied by B.Sc., B.A., and M.A., respectively. The fourth and fifth choices were M.B.B.S. and B.Ed. Ignorance of the students about the various existing degree programmes was evident. (4) It was found that majority of the students from low socio-economic status aspired for arts degree, whereas majority from the high socio-economic status aspired for science degree courses. (5) It was found that the majority of the students from high caste preferred degree level of education than from the low caste and medium caste categories. But there was no significant association between academic aspirations and caste of the respondents. Similarly, family type, family size, family income, parents' education were not significantly associated with academic aspirations but mother's and father's occupations and socio-economic status of the respondents were significantly associated with academic aspirations. [0688]

✓ Singh, Jai Pal. 1992. **Personality factors and attitude towards modernization of secondary school teaching and teachers.** Ph.D., Edu. Rohilkhand Univ. Guide: Dr. Y.K. Gupta.

Problem: The study centred around the personality factors and attitude towards

modernization of secondary school teaching and teachers.

Objectives: (i) To study the attitudes of the teachers towards modernization in terms of significant patterns, (ii) to study the differences in personality factors of the teachers from male-female, rural-urban, English medium- Hindi medium and government - aided schools, and (iii) to find out the relationship between the attitude towards modernization and the personality factors of the teachers.

Methodology: The sample of the study comprised 515 teachers from high schools and intermediate colleges of Moradabad division. The sample was selected through stratified random sampling technique. The tools used to collect data were a questionnaire and an attitude scale developed by the researcher. The collected data were treated with mean, SD, 't' test and chi-square.

Major Findings: (1) The male school teachers were more attentive about modernization in the educational sphere than female school teachers. (2) The female school teachers were more devoted to their educational responsibilities in the field of science and rationality than the rural school teachers. (3) The urban male school teachers of English medium schools were more eager to widen their knowledge about various sectors of Indian cultural and civil vividities than the urban female school teachers of Hindi medium schools. (4) The urban female government school teachers of English medium schools were more aggressive in the field of family planning than the rural male aided school teachers of Hindi medium schools. (5) The urban male aided school teachers of English medium schools were more advanced in the field of social mobility than the rural female government school teachers of Hindi medium schools. (6) In the field of education, English medium and Hindi medium school teachers had positive attitudes towards modernization. (7) There was significant difference between male-female, rural-urban, English medium - Hindi medium and government-aided school teachers on the personality factors-A and L attitude towards modernization. (8) There was a significant difference between male-female school teachers on the personality factor-E and attitude towards modernization. (9) There was highly significant

difference between male-female, rural-urban, English medium-Hindi medium and government-aided school teachers on the personality factor L and attitude towards modernization. (10) There was positive correlation between the personality factor-B and attitude towards modernization of male, Hindi medium and government school teachers. (11) There was highly positive correlation between the personality factor - O and attitude towards modernization of female, English medium and aided school teachers. (12) There was correlation between the personality factor - Q4 and attitude towards modernization of female, English medium, Hindi medium and government school teachers. [0541]

HIGHER EDUCATION

PRADHAN, S.K. 1997. **A critical inquiry into the academic staff orientation scheme of U.G.C.** Ph.D., Edu. *The Maharaja Sayajirao Univ. of Baroda*. Guide: Dr T.P. Lulla.

Problem: The study examines the present status of academic staff orientation scheme and its impact on the beneficiaries and functionaries of the Academic Staff Colleges.

Objectives: (i) To study the progress of Academic Staff Orientation Scheme (ASOS) with reference to orientation programme, (ii) to report the current status of Academic Staff Colleges (ASCs) with reference to infrastructure, human resources and finance, (iii) to study the suitability of the present model of orientation programme with reference to its structure, organization, curriculum, instructional process and evaluation, (iv) to study the participants' overall perception of the ASOC, (v) to study the problems of participant teachers with reference to their selection for orientation course, (vi) to study the problems of ASCs regarding organization of orientation programme, and (vii) to study the impact of orientation courses on teachers who participated in orientation programmes.

Methodology: The sample of the study comprised 18 Directors of ASCs, 240 participant teachers and 30 resource persons from 7 Academic Staff Colleges. The ASCs were selected through

random sampling technique. The tools used to collect the data included questionnaires, rating scale, semi-structural and unstructural interview schedule and observation-schedule. The collected data were treated with percentages, 't' test and ANOVA.

Major Findings: (1) The progress of Academic Staff Orientation Scheme was far from satisfactory as the number of orientation programmes conducted and number of participants that participated in those programmes was far below the proposed target for such programmes. (2) Considering the infrastructure, there were both resourceful ASCs and poor ASCs. In many ASCs the core academic posts were found to remain vacant often. (3) Financial position of the ASCs, though found to be stable, the directors of ASCs did not seem to be fully satisfied regarding allocation of the funds. (4) Though the present duration of the orientation programme was rated as adequate by the directors of ASCs and the participants, there was a pervasive feeling that the course duration should be reduced by a week. (5) Most of the curricular components were rated as relevant by the directors and participants except by the participants from commerce faculty. (6) In general, the participants gave favourable ratings regarding reading/reference material supplied during orientation programme. (8) Participants' overall perception about the orientation programme was not good. (9) During the orientation programme participants were mainly faced with the problems of completing their assignment due to lack of sufficient reference material in the ASC libraries, non-availability of meaningful transcript of the lectures and discussion briefs, problems of adjusting in the sub-standard boarding and lodging and non availability of resource persons for clarification of doubts. (10) The ASCs had their own set of problems pertaining to lack of adequate infrastructure, human resources, sufficient fund, proper response from its clientele, non-availability of competent resource persons at local level and lack of adequate technical support from university and UGC. (11) There were mixed reactions amongst the teachers regarding the impact of orientation programme. For half of the respondents, orientation courses were inspiring, whereas, for majority of the teachers change in their style of

teaching, writing skills, relationship with students and participation in collective decision making was not significant. [0606]

LANGUAGE EDUCATION

✓ DAMAYANTI, J. UMRA. 1994. **Preparation and try-out of a course in English for the trainees of primary training colleges in Gujarat.** Ph.D., Edu. Sardar Patel Univ. Guide: Prof. Subhash S. Jain.

Problem: This study reports on the try-out of a task-based course to teach English at the Primary Training College (PTC) level.

Objectives: (i) To improve the trainees' competence in English, and (ii) to improve their professional skills in teaching English.

Methodology: Both the survey method and the experimental method were used in this study. The needs of the PTC trainees were identified through responses obtained from questionnaires and personal interviews. The course was tried out in four Primary Training Colleges in two districts - Kheda and Panchmahal. In each group there were 30 to 45 trainees. The contact period was six weeks in each case. A pre-test and a post-test were administered before and after the try-out. Mean, SD, Co-efficient of Variation and 't' test scores were computed to establish statistical significance.

Major Findings: (1) About 70 % of the trainees were interested in learning English because many of the primary schools in the state offered English in Standards V to VII. (2) The teachers in the primary schools were aware of their limited language competence which made it difficult for them to teach English. (3) The practicing teachers in the secondary schools were dissatisfied with the teaching of the primary school teachers. (4) There was a need for a course in English and ELT in the PTCs. (5) The task-based course prepared as part of this study was suitable for trainees of both urban and rural areas, including tribal regions. (6) The course was helpful in developing a significant amount of interaction. (7) The tasks used in the course can even be used by the trainees in their own primary classes with some adaptation. [0542]

KULKARNI, L.V. 1997. **A battery of Cloze tests for college-entrants.** Ph.D., Eng. Shivaji Univ. Guide: Prof. S.V. Shastri.

Problem: It is an attempt to develop a battery of Cloze tests for use with college-entrants.

Objectives: (i) To assess the inter-reliability of public examinations, (ii) to assess the reliability of Cloze tests as an objective and scientific measure of reading, comprehension and overall language proficiency in English as a second language within the tests themselves, proving thereby the in-built reliability of Cloze tests, (iii) to assess cross-reliability of Cloze tests and public examination devices, (iv) to develop a battery of Cloze tests for the college-entrants, and (v) to examine whether Clarke and Burdell Model based on Cloze scores can be used for diagnostic purposes.

Methodology: The sample of the study comprised 1754 first year degree students of the senior colleges in the city of Solapur. Stratified random sample method was used for the selection of the 10 % of the population. The Cloze tests were developed and administered to collect the data. The collected data were treated with correlations.

Major Findings: (1) Applying Conolly and Sluckin's guidance formula, scores of the students in English at the S.S.C. and H.S.C. Exams. moderately correlated with each other. (2) Cloze scores of the students and their scores in English at the H.S.C. Exam. gave a high correlation. (3) The in-built equivalence reliability of Cloze tests by applying KR (21) formula was for Arts, 0.94; for science, 0.88 and for commerce 0.92. (4) Using Clarke and Budell's Model for diagnosing the areas of weaknesses, based on Cloze scores, it was found that a majority failed in distinguishing the semantically weak students as against the syntactically weak ones in the given situation of our experiment. (5) Cloze tests measured language proficiency not only quantitatively, but also qualitatively. [0551]

PHADKE, VASANTI. 1997. **An experiment in the teaching of idioms and phrases (concept, form and use) at the primary school stage.** Textbook and Curriculum Research: Annual

Research Report 1993-94, 40-43. Pune: Maharashtra State Bureau of Textbook Production and Curriculum Research.

Problem: The study tries to assess the knowledge of primary school pupils about idioms and phrases and to conduct an experiment in improving it.

Objectives: (i) To assess the usefulness of exercises on idioms and phrases given in the Marathi (mother tongue) textbooks, (ii) to develop teaching models that may be useful in preparing teacher's handbooks, (iii) to study the social and cultural values reflected in idioms and phrases, (iv) to test the knowledge of primary school pupils about idioms and phrases, and (v) to assess the effectiveness of the teaching method adopted in the project for teaching idioms and phrases.

Methodology: The sample of the study comprised 60 pupils. Of these, first 30 pupils were selected from Class V and the remaining 30 pupils from Class VIII. These pupils were selected from two schools, one situated in South Bombay and the other in suburban area. The researcher prepared a list of Marathi idioms and phrases to administer a test.

Major Findings: (1) The Marathi (mother tongue) textbooks for Standards III, IV, V, VI, VII and VIII contained 20, 33, 45, 44 and 82 idioms respectively. (2) The meaning of proverb, idiom, and phrases had nowhere been made clear, either in the textbooks or in the teacher's handbooks. (3) Pupils found it easy to understand idioms than phrases. (4) Pupils found it difficult to distinguish between proverbs and idioms, or between idioms and phrases, because they did not have a clear idea of the concept of 'idiom'. (5) The pupils who participated in the experimental teaching were found to be lacking in the listening skill. [0649]

RANI, P. USHA. 1997. **The creativity of high school pupils in learning the English language.** Ph.D., Edu. Univ. of Calicut. Guide: Dr. C.P. Sreekantan Nair.

Problem: This study is centred upon the creativity of high school pupils in learning the English language.

Objectives: (i) To find out if there is any significant relation between pupils with different levels of creativity, viz. high, average and low and their achievement in English, (ii) to find out if sex differences exist in creativity and its relation to the learning of English, (iii) to study whether there is any significant difference between creativity and achievement in English among urban and rural children, (iv) to find out the relation between creativity and achievement in the different areas of the English language such as (a) prose, (b) poetry, (c) structure, (d) vocabulary and (e) composition. (v) to study the relationship between the components of fluency like word fluency, expressional fluency, ideational fluency and associational fluency and their relationship to achievement in the English language, (vi) to study different components of flexibility such as spontaneous flexibility and adaptive flexibility and their relation to learning English language, (vii) to study the originality in creativity and its relationship with the achievement of children in English, (viii) to study the trait of elaboration and its relation to the achievement in the English language, (ix) to study the component of sensitivity to problems and its relation to achievement in the English language, (x) to study the ability for redefinition and its relation to the achievement in the English language, (xi) to study the relation between verbal and non-verbal creativity.

Methodology: The sample of the study comprised 500 pupils (200 boys and 300 girls) from urban and rural areas of Trissur Educational District. The tools used to collect the data were a Test of Literary Creativity in English, Comprehensive Test of Creativity and an achievement test. The collected data were treated with mean, SD, 't' test, and correlation.

Major Findings: (1) There was no significant relation between levels of creativity and achievement in English. (2) There was significant difference between the mean scores of boys and girls. (3) There was significant difference between the urban and rural pupils in the comprehensive test of creativity and none in the test of literary creativity and in the achievement test in English. (4) Children were significantly creative in learning various aspects of the English language such as prose, poetry, structure, vocabulary and composition. (5) There was significant

relationship between learning English and the trait of creativity of fluency, flexibility, originality, elaboration, sensitivity to problems and redefinition. (6) There existed significant relation between verbal and nonverbal creativity. (7) There was a tremendously high and significant relationship between the test of literary creativity and comprehensive test of creativity. (8) There was a significant relationship between the test of literary creativity and the achievement test in English. (9) Significant relationship was also seen between comprehensive test of creativity and the achievement test in English. [0546]

SWAIN, JANAKI BALLAV. 1996. **Role of memory and intelligence factors in early reading in Oriya orthography: A developmental observation.** Ph.D., Psy. Utkal Univ. Guide: Prof. S. Sahu.

Problem: It attempts to study the role of memory and intelligence factors in early reading in Oriya orthography.

Objectives: (i) To look into the role of intelligence and memory factors in early reading in Oriya orthography, (ii) to make observations at two points of reading skill development: at the point of beginning reading and at the point of relatively fluent oral reading, and (iii) to look into oral reading and reading comprehension dimensions of reading performance.

Methodology: The sample of the study comprised 120 students of both genders. They were studying in Grades II and V. The tools used to collect the data were Raven's Progressive Matrices, Digit Span and Letter Span, Cloze Tasks and Passage Comprehension Tasks. The collected data were treated with 'Z' scores, multiple correlations and backward stepwise regression analyses.

Major Findings: (1) Short Term Memory (STM) measures had been found to be significant contributors to oral reading performance at both grade levels. (2) Long Term Memory (LTM) had been found to be a significant component of determinants when comprehension in reading was involved. [0680]

VANKER, ISHIWARDHAI NARANBHAI. 1996. **An investigation into the proficiency in the**

subject of Gujarati of the secondary school teachers. Ph.D., Edu. Sardar Patel Univ. Guide: Dr. Anilchandre S. Joshi.

Problem: The study tries to investigate into the proficiency in the subject of Gujarati of the secondary school teachers.

Objectives: (i) To construct and standardize a test to study Gujarati language proficiency of secondary school teachers, (ii) to study the Gujarati language proficiency of secondary school teachers in relation to area, sex, educational qualifications, experience, socio-economic-status, teaching and reading interest of the subject, (iii) to study the effect of SES on Gujarati language proficiency of secondary school teachers, and (iv) to study the effect of teaching and reading interest of subjects on Gujarati language proficiency of secondary school teachers.

Methodology: The sample of the study comprised 1210 teachers of secondary school. One thousand teachers were selected through stratified random sampling method and two hundred and ten teachers were selected by random sampling method. The tools used to collect data were Gujarati language proficiency test and teaching and reading interest questionnaire by the investigator, and socio-economic measurement test of Patel. Various quantitative techniques including chi-square, ANCOVA and correlations were used to treat the collected data.

Major Findings: (1) Urban areas' secondary school teachers obtained an insignificant mean in the Gujarati language proficiency score than rural areas' secondary school teachers. (2) Male secondary school teachers obtained an insignificant mean in the Gujarati language proficiency score than female secondary school teachers. (3) M.A., B.Ed. secondary school teachers obtained a higher mean in the Gujarati language proficiency score than B.A., B.Ed. secondary school teachers. (4) M.A., B.Ed. / B.A., B.Ed. secondary school teachers obtained a higher mean in the Gujarati language proficiency score than other graduate teachers. (5) More than 16 years of educational experience group obtained a higher mean in the Gujarati language proficiency score than 6 to 15 years

educational experience group, whereas 6 to 15 years of educational experience group obtained a higher mean in the Gujarati language proficiency score than 0 to 5 years of educational experience group. (6) Upper SES group obtained a higher mean than the middle and lower SES group. Similarly middle SES group obtained a higher mean than the lower SES group. (7) Teaching reading interest of language group obtained a higher mean than teaching reading interest of informative subject group and science maths group. (8) SES and teaching reading interest were significantly related to the Gujarati language proficiency score of secondary school teachers. [0608]

SCIENCE EDUCATION

JOSHI, ANURADHA AND MAHAPATRA, B.C. 1997. **Effectiveness of computer software in terms of reasoning ability in science.** *Psycho-Lingua*, Vol. 27(1), 35-40.

Problem: It is an attempt to study the impact of teaching through computer software package on the reasoning ability in science of school children.

Objective: To compare the developed software package with traditional method in terms of reasoning ability in science by considering intelligence as a co-variate.

Methodology: The sample of the study comprised 67 students of both the sexes of Class IX from Indore Public School (IPS) and Rising Star Higher Secondary School (RSHSS), Indore. 32 students from IPS constituted the experimental group whereas 35 students from RSHSS constituted the control group. Their age ranged between 13 to 16 years and they belonged to average SES. The tools used to collect the data included Group Intelligence Test of Mehta and Reasoning Ability in Science by Joshi and Mahapatra. The collected data were analysed using ANCOVA.

Major Findings: (1) It was found that the adjusted mean scores on overall reasoning ability in science and its aspects of the students taught through developed software package differed significantly from those taught through traditional method when intelligence was taken

as a co-variate. (2) It was found that the adjusted mean for analogy classifications, eclectic, deductive inductive reasoning and overall reasoning in science of students taught through developed computer software package were significantly higher than the corresponding figures for those taught through traditional method. [0597]

✓ KULKARNI, B.B. 1997. **A study of the effect on pupil achievement caused due to the use of teacher's handbook as teaching aid.** *Textbook and Curriculum Research: Annual Research Report 1993-94*, 73-76. Pune: Maharashtra State Bureau of Textbook Production and Curriculum Research.

Problem: It attempts to study the effect on pupil achievement caused due to the use of teacher's handbook in science as teaching aid.

Objectives: (i) To measure the difference in pupil achievement caused by the teacher's use of teacher's handbook, and (ii) to find how far the teacher's handbook is useful to the teacher.

Methodology: The sample consisted of 102 experimental group students and 97 control group students who were studying in Class IV and were selected from two schools, viz. Z.P. School and Yogeshwari Nutan High School. An achievement test was used to collect the data.

Major Findings: (1) There was noticeable difference in science teaching done by the teachers of Standard IV with the help of the teacher's handbook and that done by them without the help of the teacher's handbook. (2) The difference was seen more clearly in the case of rural teachers and rural pupils. (3) The difference was not so clear in the case of urban teachers and urban pupils; however, it was noticeable enough. (4) It was the considered opinion of teachers that the use of the teacher's handbook (science) by the teachers improved the quality of their teaching, which automatically raised the achievement level of pupils. [0659]

MODI, KALPANA. 1997. **A study of the usefulness of pictures, screens and bold matter in the science textbooks of Standards III and IV (1991-1992).** *Textbook and Curriculum Research: Annual Research Report 1993-94*, 76-

79. Pune: Maharashtra State Bureau of Textbook Production and Curriculum Research.

Problem: It is a critical study of the pictures, screens and bold matter contained in the science textbooks of Standards III and IV with special reference to their usefulness as well as to make suggestions for improving them.

Objectives: (i) To construct tools to study the usefulness of pictures, screens and bold matter in the science textbooks of Standards III and IV, from the point of view of students, teachers and parents, (ii) to classify the pictures, screens, and bold matter occurring in the science textbooks of Standards III and IV, and (iii) to study the suggestions made by students, teachers and parents in connection with the pictures, screens, and bold matter contained in the textbooks under study.

Methodology: The sample of the study comprised 61 students (32 female and 29 male) of Class III and IV, 46 female teachers and 20 parents. The tools used to collect data were questionnaire and interview schedule.

Major Findings: (1) The pictures, screens and bold matter of science textbooks of Standards III and IV were useful to the students, while learning in the school, as well as at home. (2) The pictures, screens and bold matter of science textbooks of Standards III and IV were useful to the teachers while teaching in the classroom. (3) The pictures, screens and bold matter of science textbooks of Standards III and IV were useful to the parents while teaching their child at home. [0660]

PATNAIK, S.P. AND BASAVAYYA, D. 1997. **Development of training package in Environmental Studies II for primary teacher trainers.** Independent study. Bhopal: Regional Institute of Education. (DPEP study).

Problem: The study intends to develop a training package in Environmental Studies (EVS) II for primary teacher trainers based on their training needs and learning difficulties of the students and to evaluate its effectiveness

Objectives: (i) To identify the learning difficulties of the students of Class III in EVS II, (ii) to identify training needs of primary teachers

teaching EVS II in Class III, (iii) to identify suitable method of teaching learning (activity based) in EVS II for Class III based on training needs of teachers and learning difficulties of students, (iv) to develop training package for teacher trainers based on training needs of teachers and learning difficulties of students, and (v) to evaluate the effectiveness of the prepared training package.

Methodology: The sample of the study comprised 269 students of Class III, who were just promoted to Class IV and 17 teachers teaching EVS II in Class III from 17 schools of Kurnool district. They were selected using simple random sampling technique. The tools used to collect data were criterion referenced test on EVS II, teacher questionnaires, proforma for teacher trainers.

Major Findings: (1) Out of total 38 competencies, none was mastered by the students. (2) The important training needs expressed by the teachers were innovative methods of teaching, remedial measures and recording of MLL attainments. (3) Training package had positive effect on qualitative improvement in teaching and learning of EVS II in Class III. [0575]

PURANDARE, VAISHALI. 1997. **A study of the utility of the screen pictures, illustrations, matter printed in bold type in science textbooks.** Textbook and Curriculum Research: Annual Research Report 1993-94, 79-83. Pune: Maharashtra State Bureau of Textbook Production and Curriculum Research.

Problem: This study is designed to study the utility of the screen pictures, illustrations, matter printed in bold type in science textbooks.

Objectives: (i) To classify the pictures, screen and the matter printed in the bold type, (ii) to study how far the teachers make use of the screen pictures, illustrations, etc., in their teaching, (iii) to see whether the pictures, illustrations, screen and bold type in the textbooks are useful to the teachers, (iv) to see whether the pictures, illustrations, screen and bold type in the textbook are useful to parents in helping their children in self-study, and (v) to consider the practicability of the suggestions made by students, teachers and parents for improving pictures, illustrations, screen, etc. in

the textbook.

Methodology: The sample of the study comprised 40 teachers, 100 students drawn from 20 primary and secondary schools, and 10 parents. 20 teachers taught Class V and an equal number of teachers taught Class VI, whereas the students were drawn from each standard. The relevant data were collected using questionnaire and interviews as tools.

Major Findings: (1) The picture, illustrations, screen and the matter typed in bold letters were useful to students while studying in schools as well as at home. (2) The pictures, screen and the matter typed in bold letters in science textbooks were also useful to the teachers while teaching in the class. (3) Parents also made use of pictures, illustrations and the screen while teaching their wards at home. (4) The cover of science textbooks for Standards V and VI and the pictures therein were liked by students. (5) The students liked the picture printed near the title in the textbook most. They liked the red and blue coloured pictures. They also saw the pictures in the textbooks as and when they got time. [0661]

RANI, S.D. 1997. A study of problems of science education and attitude of students towards science in high schools of East Khasi Hills district, Meghalaya. Ph.D., Edu. North-Eastern Hills Univ. Guide: Dr. M.A. Sudhir.

Problem: This study addresses the problems and constraints of teaching science at the high school and also attempts to analyse the students' attitude towards science.

Objectives: (i) To study the problems and constraints of science education at the high school stage, (ii) to construct and standardise a science attitude scale for the students of Class IX, (iii) to compare the science attitude of students on the basis of gender ethnicity, and (iv) to examine the influence of science clubs, science quiz, science exhibition etc., on the students' attitude towards science.

Methodology: The sample of the study comprised 1000 students (591 boys and 409 girls) from 30 schools (2 Government High Schools, 16 deficit and 12 private schools). The tools used were

questionnaire, Science Attitude Scale and personal interview. The collected data were treated with 't' test, analysis of variance and chi-square.

Major Findings: (1) There existed an acute shortage of qualified and trained science teachers in rural areas. Majority of the rural science teachers were found to be ignorant of the objectives of science teaching. Inadequate reference materials in libraries, non-existence of laboratory as well as laboratory assistants was observed. Science clubs were found to exist only in 30 % of schools. (2) Male and female students were found to be homogeneous in their attitude towards science. The science attitude scores did not show any statistically significant difference in the case of students of different types and locale of schools. But tribal and non-tribal students differed significantly in their science attitude scores. (3) F values were found to be significant for sex and type of school, whereas the sex and locale, locale and type of school did not reveal any significant difference. (4) It was observed that urban students from all the different types of schools were significantly superior when compared to their rural counterparts. (5) Students who participated in science club activities and science quiz competitions were found to possess favourable and positive attitude towards science. [0559]

SATAPATHY, M.K.; SHARMA, A.L.N. AND MISHRA, P.K. 1996. Development of local-specific and activity-oriented resource materials for promoting learner-centred MLL-based teaching of EVS-II at Class III stage in Gajapati district of Orissa. Independent study. Bhubaneswar: Regional Institute of Education. (DPEP study).

Problem: The study tries to realise the issue(s) that activity oriented learning materials based on the immediate environment of the child, makes learning effective and improves the achievement/ performance of the learners.

Objectives: (i) To identify and collect information relating to the bio-physical and social resource diversities existing in the Gajapati district, and (ii) to categorize and document the collected information with respect to the existing curricular concepts reflected in the textbook.

Methodology: The sample of the study comprised 30 primary school students of Class III, located in seven blocks of Gajapati district in Orissa. The subjects were selected with the consultation of district inspector and sub-inspector of schools.

Major Findings: (1) More than 200 examples and 100 activities had been identified for EVS-II, in Class III, pertinent to curricular concepts. (2) The suggested supplementary examples and activities, besides being useful in transaction of lessons, made learning joyful and interesting. [0574]

VIDHATE, SULABHA, N. 1997. **Preparation of the teaching programme for development of scientific attitude based on Standard VIII science syllabus and a study of the effectiveness of programme.** Ph.D., Edu. Shreemati Nathibai Damodar Thackersey Women's Univ. Guide: Dr (Mrs.) Leena Deshpande.

Problem: This attempts to study the preparation of the teaching programme for development of scientific attitude based on Standard VIII science syllabus and a study of the effectiveness of programme.

Objectives: (i) To prepare a teaching programme based on Standard VIII science syllabus for development of scientific attitude, and (ii) to implement the formulated teaching programme and study its effectiveness.

Methodology: The sample of the study comprised 240 students including both girls and boys from Sou. Vimalabai Garware High School in Pune city. Incidental cluster sampling method was used to select the sample. The tools used to collect the data included Scientific Attitude Test and questionnaire by Smita, apart from a checklist prepared by the researcher. The collected data were treated with ANCOVA.

Major Findings: (1) It was found that scientific attitude of students developed after implementing teaching programme of science. (2) It was found that there was no sex difference in development of scientific attitude. (3) It was found that teaching programme was useful to develop scientific attitude among students.

[0550]

MATHEMATICS EDUCATION

BASAVAYYA, D. AND PATNAIK, S.P. 1997. **Development of training package in mathematics for primary teacher trainers.** Independent study. Mysore: Regional Institute of Education. (DPEP study).

Problem: This study evaluates the development of a training package in mathematics for primary teacher educators and its effect on the performance of teachers and students.

Objectives: (i) To identify the difficulties of students in learning mathematics in Class I, (ii) to identify teachers' problems and difficulties in teaching mathematics in Class I, (iii) to study the extent of attainment of MLL competencies by different student groups, (iv) to evaluate the effectiveness of the package, and (v) to develop relevant training package and try it out.

Methodology: The sample of the study comprised 201 students and 15 teachers. They were selected using simple random sampling procedure from 15 schools of the Kurnool district (A.P.). A diagnostic test and a questionnaire developed by the investigator were used to collect the data.

Major Findings: (1) Except in the following four competencies, the students could not attain the mastery level in any of the remaining competencies: (i) counts from 1-20 using objects and pictures, (ii) uses non-standard units of mass (weight) (such as stones, beads, etc.) to weigh objects in immediate environment using a toy scale/pan balance, (iii) recognizes coins/currency notes of different denominations, and (iv) recognizes numerals and matches numbers to numerals from 1-100. (2) Students reported more difficulties in learning the following competencies: (i) stating of place value of digits in the numbers 10-20, (ii) recognition and naming the four basic shapes — circle, triangle, rectangle and square, (iii) drawing freehand circle, triangle, rectangle and square to demonstrate understanding of basic properties of the four shapes, (iv) recognition and classifying various solids in the environment on

the basis of their shapes without necessarily mentioning their geometrical names, (v) demonstrating understanding of place value by expanding numbers 10-20 into 'tens' and 'ones' and by expressing the expanded form as a two digit number, (vi) arranging numbers from 1-100 in ascending and descending order, (vii) interpreting and writing the symbols 'plus', 'minus' and 'is equal to'. (3) Teachers reported difficulties in teaching the following competencies: (i) recognising and naming the four basic shapes — circle, triangle, rectangle and square, (ii) draws freehand circle, triangle, rectangle and square to demonstrate understanding of the basic properties of the four shapes, (iii) classifying various solids in the environment on the basis of their shapes without necessarily mentioning their geometrical names. (4) Teachers also expressed their difficulties in teaching mathematics in multigrade setting. It was observed that the teachers were not aware as to how to evaluate the attainment of competencies in mathematics so that they may be able to take necessary remedial measures for weaker students. (5) Keeping in view the students' difficulties and teachers' problems, a training package containing the following aspects was prepared: (i) Objectives, (ii) Guidelines for trainers, (iii) Schedule for organizing 5-day programme, (iv) Different activities to teach different competencies in Class I mathematics, and (v) Brief write-ups regarding some of the aspects — evaluation, diagnostic tests, multigrade teaching, MLLs and remedial teaching. [0572]

BUSSAMA, K. 1993. **The effect of simulation technique in the teaching of mathematics.** *The Progress of Education*, Vol. LXVII(7), 151-154.

Problem: This study is designed to examine the effect of simulation technique in the teaching of mathematics.

Objective: To study the effect of simulation technique in the teaching of mathematics with reference to one subject area "matrices".

Methodology: This study was conducted on 30 students, aged between 12 and 13 years, who were divided into experimental and control

groups. An objective type test was administered in order to collect the relevant data. The data were analysed using mean, SD and 't' test.

Major Finding: The simulation technique was found better in learning mathematical topics than the traditional method. [0637]

DASH, P.C. 1996. **Effects of instructional strategies on the situation processes of primary school children in arithmetic problems.** Independent study. Bhubaneswar: Regional Institute of Education. (DPEP study).

Problem: This study focuses on the effect., of instructions using innovative self-learning activity sheets on the problem-solving behaviour of Class III children leading to mastery level performance.

Objectives: (i) To develop parallel forms of diagnostic problems tasks for identifying the Class III non-mastery children in solving arithmetic problems, and for analysing the errors committed by them, (ii) to develop remedial instructions for try out with non-master children for improving their problem-solving ability, and (iii) to find the effects of remedial instructions in the achievement of mastery level performance among these children in solving arithmetic problems.

Methodology: Out of 11 government managed primary schools in the vicinity of RIE, Bhubaneswar, the IRC Village Primary School, Nayapalli was selected randomly for conducting the study. From a total of 91 Class III children of this school, a sample of 60 children (42 boys and 18 girls) was drawn. The tools used in the present study included Diagnostic Problems Tasks, and self-learning activity sheets. The collected data were treated using quantitative method.

Major Findings: (1) The remedial intervention in solving different types of problems on multiplication and division was found to be effective. (2) The percentage differences on problem types multiplication, division by multiplier of the problem classes of 'equal groups' and equal measures were not found significant as a result of instruction. (3) In problem type 'multiplication' of problem classes and 'division by multiplier' of the same two

problem classes, there were increase in percentages though they were statistically non-significant. (4) The average performance of children after remedial instruction was significantly higher than the same before instructions, while they took significantly less time to complete problems after remedial instructions as compared to before instructions. (5) Instructions through self-learning activity sheets using heuristic search strategies not only developed the problem-solving ability of Class III children but also increased the tendency of these children to be engaged more deeply in their general mathematical activities. [0570]

DESHMUKH, VEENA. 1997. An experiment in the use of educational technology for teaching mathematical concepts. Textbook and Curriculum Research: Annual Research Report 1993-94, 61-64. Pune: Maharashtra State Bureau of Textbook Production and Curriculum Research.

Problem: The study is designed to develop alternative strategies and support activities, as well as instructional material to facilitate learning of the unit 'Vulgar Fraction' in the mathematics syllabus of Standard V.

Objectives: (i) To analyse mathematics textbooks at primary stage for identification of basic concepts required for teaching the unit 'Vulgar Fraction', (ii) to develop concrete material for teaching of these basic concepts, (iii) to develop activities, games, A.V. aids appropriate for teaching of specific concepts, and (iv) to develop criterion referenced tests for different concepts involved in the unit 'Vulgar Fraction'.

Methodology: The sample of the study comprised 103 students, who were divided into groups of 27 (Group I), 26 (Group II), 24 (Group III) and 26 (Group IV). Group I and Group III consisted of Marathi-medium pupils, while Group II and Group IV consisted of English-medium pupils. The pre-test treatment and post-test techniques were used. The Unit test in mathematics was used. That apart, two different strategies—(a) use of flannel board and cut-outs, and (b) use of straws and bands—were used. The collected data were treated with mean, SD, 't' test and critical ratio.

Major Findings: (1) It was observed that 'what the pupil learns depends upon what the teacher does'. (2) It was felt that the teacher needs alternative approaches to suit varying individual learning needs of pupils. (3) It was learnt that determining and considering entry behaviour of pupils was a pre-requisite for planning of learning situation for introducing a new concept. (4) It was felt that developing mental imagery was ignored in many of our textbooks. (5) It was found that if the child learns through games, he does not feel the stress of learning, and learning becomes easier and enjoyable. [0655]

GOEL, S.K. 1996. A study of mathematical language needs of students of Classes I and II for smooth transaction from concrete to abstract stages of comprehension of mathematics teaching. Independent study. Bhubaneswar: Regional Institute of Education. (DPEP study).

Problem: This study attempts to examine the problems faced by children in arithmetic learning and its remedial measures.

Objectives: (i) To identify various task levels and primary descriptors for each level, (ii) to identify various learning problems related to arithmetic difficulties, (iii) to identify the types of arithmetic errors and specific error patterns, (iv) to construct a test to effectively assess specific arithmetic skills, (v) to design appropriate remedial teaching skills, and (vi) to compare the performance of children in rural and urban schools.

Methodology: The sample of the study comprised 300 children of Classes I and II studying in rural and urban multigrades with poor academic achievement in mathematics. They were given a wide variety of concrete aids in the form of coloured beads, blocks, marbles, rods, discs, number boards, abacus, measurement devices, cards and charts, geometric shapes, coins and currency notes, model clock, etc., which were used for intervention. Critical interview technique was also used. The collected data were treated using rank difference correlations.

Major Findings: (1) The performance of students at representational level was better than their performance at abstract level. (2) Students

performed better at concrete level than representation and abstract levels. (3) The learning problems as related to arithmetic difficulties as identified included memory problems, reading problems, language problems, cardinality problems, symbol confusion, inability to group sets, ordinary problems, lack of the concept of place values, inability to subtract, and lack of mastery of computational skills. [0569]

NALAGE, R.R. 1997. A critical study of the difference in effectiveness of teaching done with the help of teacher's handbook for mathematics for Standard III (1991) and that done without its help. Textbook and Curriculum Research: Annual Research Report 1993-94, 58-61. Pune: Maharashtra State Bureau of Textbook Production and Curriculum Research.

Problem: This study tries to examine the difference in effectiveness of teaching done with the help of teacher's handbook for mathematics for Standard III and that done without its help.

Objectives: (i) To find out whether mathematics teachers take guidance from the teacher's handbook in their teaching work, (ii) to find out what sort of difference in teaching is caused by the use of the teacher's handbook, (iii) to study the difference in pupils' learning caused by the use of teacher's handbook by the teacher in his teaching work, and (iv) to find out whether the use by the teacher of the teacher's handbook results in higher level of pupil achievement.

Methodology: The sample comprised 70 students studying in Class III, who were selected from Jiyamata Practicing School. Of these 70 students, 35 belonged to the control group and 35 belonged to the experimental group. Unit test was used to collect the data.

Major Findings: (1) Teaching of mathematics became more effective when it was done with the help of the teacher's handbook. (2) It gave new directions to the teaching of mathematics. (3) It motivated teachers to prepare novel teaching aids. (4) The handbook helped the teachers in explaining difficult mathematical concepts to pupils. (5) The mathematics teacher's handbook was helpful in securing better participation of pupils in the teaching-

learning process. [0654]

PARIA, DEBASIS. 1996. A comparative study of mathematical achievement of boys and girls at secondary level. Journal of Centre for Pedagogical Studies in Mathematics, 6-8.

Problem: This study compares the mathematical achievement of boys and girls at secondary level.

Objectives: (i) To compare the achievement of boys and girls in mathematics at the Madhyamik level, and (ii) to examine the gender variation, if any, in the performances in different items of the question paper and in different branches of mathematics, i.e., algebra, geometry, arithmetic, mensuration and trigonometry.

Methodology: The sample of the study comprised 1000 students (500 boys and 500 girls). Of these, 30% belonged to semi-urban areas and the rest belonged to the rural areas. Achievement-cum-Diagnostic Test in Mathematics was used to collect the relevant data. The collected data were treated with mean, SD and 't' test.

Major Findings: (1) It was found that girl students had mostly answered the theorem part correctly. Some of the boys answered the rider part correctly but many committed mistakes in answering the theorem part. (2) It was found that girls were better in answering the conventional problems in geometry. Further, it was observed that the variability of boys, in all cases, was greater than that of the girls. (3) It was observed that girls answered conventional problems in greater number than boys, while the boys attempted all types of questions in greater number than girls. [0603]

PATEL, CHATUR, P. 1997. Impact of test anxiety and test defensiveness on the achievement in mathematics of secondary school students. The Progress of Education, Vol. LXXI(6), 141-144.

Problem: It attempts to study the impact of test anxiety and test defensiveness on the achievement in mathematics of secondary school students.

Objectives: (i) To study the effect of test anxiety on the achievement in mathematics of secondary

school students, (ii) to study the effect of test defensiveness on the achievement in mathematics of secondary school students, (iii) to study the gender difference on the achievement in mathematics of secondary school students, and (iv) to study the interaction effect of test anxiety, test defensiveness and gender on the achievement in mathematics of secondary school students.

Methodology: The sample of the study comprised 393 secondary school students of Class IX from Kheda district in Gujarat. They were selected through cluster sampling technique. The tools used to collect the data were Test Anxiety Scale by Wallace, Test Defensiveness Scale by Wallace, Achievement Test in Mathematics and an interview schedule developed by the investigator. The collected data were treated with mean, SD, and ANOVA.

Major Findings: (1) It was found that low test anxiety group showed better performance in mathematics than the high test anxiety group. (2) It was found that there was no significant effect of test defensiveness on the achievement in mathematics. (3) It was found that gender played a role on achievement score in mathematics, i.e. the boys did better in achievement than the girls, in mathematics. (4) There was no significant interaction effect of test anxiety, test defensiveness and gender on the achievement in mathematics. [0624]

RAGHAVAN, S.S. 1997. Development of a training package for teachers based on the identification of teaching-learning difficulties in mathematics in Class I of Tamil Nadu schools. Independent study. *Mysore: Regional Institute of Education.* (DPEP study).

Problem: This study aims at identifying the "hard spots" in mathematics for Class I students so that intervention can be made to overcome the deficiencies.

Objectives: (i) To identify the difficulties of students of Class I in understanding certain concepts in mathematics, (ii) to develop a suitable training package for teachers so that effective learning in mathematics is achieved at Class I, and (iii) to evaluate the developed package in schools.

Methodology: In the present study, a training package for teachers was developed to identify the teaching learning difficulties in mathematics at Class I level in Tamil Nadu. Based on the difficulties, so developed training package on mathematics was tested for its efficacy using pre-test post-test design. The pupils' performance was compared and inferences were made in the study.

Major Findings: (1) An analysis of pre-post test scores showed that there was a significant improvement in students' performance pertaining to all the competencies. (2) It was observed that in the eleven competencies which were identified as 'hard spots' and on which the training package was developed, there was noticeable improvement in pupils' performance. [0573]

RAJU, SANTHAMMA. 1996. Mathematical aptitude in relation to socio-familial variables. *Experiments in Education*, Vol. XXIV(1), 13-19.

Problem: It attempts to find out the relationship between nine socio-familial variables and mathematical aptitude of secondary school pupils.

Objectives: (i) To find out the relationship between mathematical aptitude and each of the socio-familial variables for the total sample and sub-samples, (ii) to find out whether significant difference in the correlation co-efficient of mathematical aptitude and socio-familial variables exists between boys and girls, rural and urban pupils and forward and backward caste pupils, and (iii) to test whether significant difference exists in the mean scores of socio-familial variables between high, average and low mathematical aptitude pupils.

Methodology: The sample of the study comprised 700 students of Standard IX of ten schools from three districts of Kerala state. They were selected through stratified sampling technique. The tools used to collect the data were Socio-Familial Inventory by Nair, Kerala Socio-Economic Scale by Nair and Mathematical Aptitude Test by Santhamma Raju and Shree Prakash. The collected data were treated with Pearson's Product Moment Correlation, test of significance of difference between correlation and one-way

analysis of variance.

Major Findings: (1) Among the nine socio-familial variables considered, it was found that for the parental education level, parental occupation level, parental income level, socio-economic status and mathematical aptitude, there existed significant positive relationship. (2) There existed slight positive relationship between home learning facility-family acceptance of education, family cultural level, socio-familial status and mathematical aptitude and there was no significant relationship between family environment index and mathematical aptitude. (3) It was found that significant mean difference existed between socio-familial variables except family environment index of high, average and low mathematical aptitude pupils, who differed significantly in their mean scores of all the eight significant socio-familial variables, whereas high-, average-mathematical aptitude pupils had no significant difference in the mean scores of family acceptance of education, family cultural level and socio-familial status. [0588]

SUBRAMANIAM, K.B. AND RAM SINGH, A.K. 1996. **A study of the mistakes committed by students in the application of different mathematical skills and developing preventive and remedial teaching strategies using metacognitive approach for qualitative improvement in teaching of mathematics.** Independent study. Bhopal: Regional Institute of Education. (DPEP study).

Problem: The study examines different types of mistakes committed by students of Grades II and III in mathematics and its remedial measures using metacognitive approach.

Objectives: (i) To identify the mistakes committed by children in mathematics in Grades II and III, (ii) to analyse the sources and causes of these mistakes and to identify the emerging patterns/trends, and (iii) to evolve instructional strategies as preventive measures for wider dissemination among the teachers and learners.

Methodology: The sample of the study comprised eight government primary schools of Sehore and Bilaspur districts of M.P. Each school was visited on three consecutive days. Interview was used as a tool to collect the data.

Major Findings: (1) The students committed six types of mistakes in addition, eight types of mistakes in subtraction, ten types of mistakes in multiplication and six types of mistakes in division. (2) During interview most of the students felt that paucity of time to solve the test items, uncomfortability with subtraction, multiplication and division, carrying over problems, copying habits, presentation of test items in different mode, problems in remembering tables, etc., were the possible reasons of their poor performance in the test. (3) Some of the students felt that due to confusion between multiplication and addition signs, forgetfulness of the procedures, lack of opportunity to write on the notebook, etc., they committed mistakes in the test. (4) Poor concept of carrying over, poor concept of zero, poor concept of multiplication, introvert behaviour, lack of writing skills, etc., were observed as possible causes of mistakes committed by students. (5) The teachers of the schools had cited home environment, SES, physical facilities in the school, extra work load on teachers, lack of interest, motivation and discipline, large size of class, general promotion policy, etc., as responsible for the poor performance of children in the test. [0571]

PHYSICAL AND HEALTH EDUCATION

JAIN, A.; SHARMA, N.P. AND SHAW, D. 1997. **Validity of McDonald Soccer Test on state level female soccer players.** SAI Scientific Journal, Vol. 20(3), 25-28.

Problem: It is an attempt at validating the McDonald's Soccer Test on state level female soccer players.

Objective: To test the validity of McDonald's Soccer Test on state level female soccer players.

Methodology: The sample of the study comprised 34 women soccer players of Delhi who were selected through purposive sampling technique. Their age ranged between 18 to 26 years. Selected criteria measures of the present study were McDonald Soccer Test and subjective rating by three experts, out of ten marks each, to assess the soccer playing ability of each

woman subject on given criteria. The collected data were treated using mean, SD and correlation.

Major Finding: There existed a significant inter-relationship among all the selected soccer playing ability variable thereby confirming the validity of the soccer test. [0556]

NAGAR, S.K. 1997. **Effect of mental practice on acquisition of weight lifting techniques.** Ph.D., Phy. Edu. *Devi Ahilya Vishwavidyalaya*. Guide: Dr. M.I. Quraishi.

Problem: The study is centred upon determining the effect of mental practice on acquisition of weight lifting techniques.

Objectives: (i) To add to the existing knowledge regarding mental practice technique, (ii) to provide correct guidelines to the lifters in the matter of psychological training besides physical training, (iii) to adopt better methods and techniques to suit each individual lifter, (iv) to help in the better acquisition of weight lifting techniques, (v) to help in decreasing the actual learning time of a technique, (vi) to retain the learned techniques during recovery from an injury, during inclement weather and during period of no physical practice, and (vii) to improve strength without increase in body weight.

Methodology: The sample of the study comprised 60 male under-graduate students of Madhav College, Ujjain who were selected randomly and assigned to three groups of 20 subjects each, namely Experimental Group A, Experimental Group B, and Control Group C. The tools used to collect the data included Barbells Gymnastic sticks, and Visual and Verbal Information. The collected data were treated with ANCOVA and Post-hoc Scheffe's Test.

Major Findings: (1) There were significant differences in pre-test and post-test scores in Groups A, B and C. (2) The acquisition of weight lifting techniques was more in Group A than Group B. (3) The acquisition of weight lifting techniques was more in Group C than Group B. (4) The acquisition of weight lifting techniques was more in Group A than Group C. (5) The acquisition of T.H. Jerk technique was more

than T.H. Snatch and T.H. Clean techniques. (6) The acquisition of T.H. Clean technique was more than T.H. Snatch technique. [0611]

SINGH, KH. NARENDRA. 1997. **Assessment of nutritional status of tribal children.** Ph.D., Anthro. *Univ. of Pune*. Guide: Dr. V.S. Kulkarni.

Problem: The present study attempts to assess the nutritional status and to identify 'reference value' for nutritional status assessment of Warli children, that could be used as tools to screen and monitor growth programmes among them.

Objectives: (i) To check the validity and efficiency of somatometry predicting complications and outcome of nutrition, (ii) to derive the determinants of undernutrition and its extent, (iii) to investigate the prevalence of nutrition related diseases and their causes, (iv) to study the impact of socio-economic conditions on nutrition, (v) to study consumption pattern of foodstuffs and to assess the extent of awareness about nutrition, health and diseases, (vi) to understand conceptual ideas of health and diseases, (vii) to assess the extent of awareness about nutrition, health and disease, (viii) to compare and contrast the results of the present study with similar studies, and (ix) to recommend treatment, intervention programmes and suggest preventive measures for undernutrition.

Methodology: The sample of the study comprised 1553 subjects (745 girls and 808 boys) from 24 villages of Nasik. Their age ranged between 4+ to 10+ years. The tools used to collect data were interview schedules, observation, standard anthropometric techniques, biochemical tests, diet survey and documents. The collected data were treated with mean, SD, 't' test and chi-square.

Major Findings: (1) The mean and centile values of height and weight revealed continuous trend of growth for boys and girls. (2) The peak value of mean weight of 2.97 kg. during age 8+ to 9+ years for boys and 4.07 kg. during age 5+ to 6+ years for girls might be showing the sign of mid-growth spurt. (3) There was no significant difference between boys and girls for the mean and centile values of all anthropometric measurements. (4) The Body Mass Index (BMI)

classification showed 50% to 60% of CED Gr. III malnutrition in different age categories. For example, the highest was 66% at 5+ years followed by 64 % at 10+ years and 50 % at 4+ years. (5) Observations on clinical signs and symptoms revealed that among boys, there was an inadequacy of 11.67% of protein, 7.14% iron and 2.47% vitamins and among girls, it was 11.5% iron and 1.74% vitamins (6) Majority of the subjects were in the below normal haemoglobin level and showed signs of anaemia of various degrees. For example, Early stage of anaemia <12 gm. was found in 23.14% boys and 22.61% girls; Marked anaemia <10 gm. was found in 22.52% boys and 21.20% girls. (7) Mean energy intake in KCal/ day was much lower than the recommended dietary allowances, viz. 164 KCal for 4-6 yrs, 315 KCal for 7-9 yrs and 375 KCal for 10-12 yrs age group. (8) Marginal income group: Lower < 1000 = 63.66%, Middle 1500-2000 = 29.68%, Higher 2000+ = 6.6%. (9) Low purchasing power of the head of the families, poor personal hygiene, unsafe drinking water, food taboos, prevalence of child marriage and hindrance due to cultural practices were other factors prevalent among them. [0561]

MORAL, ART AND AESTHETIC EDUCATION

BAJPAI, SUNIL. 1997. **A study of values in relation to locale and gender.** *Indian Journal of Educational Research*, Vol. 16(2),55-59.

Problem: It attempts to evaluate the values in relation to locale and gender.

Objectives: (i) To assess one's cognitive and affective adaptation to the changing modes of life, and (ii) to study the value pattern of boys and girls belonging to different locales.

Methodology: The sample of the study consisted of 1070 urban and rural high school students in the area of tribal districts of Jhabua, Dhar and Khargone in Western Madhya Pradesh. They were selected through stratified random sampling method. The tool used to collect data was a Hindi version of Allport, Vernon and Lindzey Scale of Values by S.P. Kulshreshtha. The collected data were treated with mean, SD and

't' test.

Major Findings: (1) Theoretical, economic, aesthetic, social and religious values were found to be significant on urban students in comparison to their rural counterparts. But on political value, the urban students were found to be non-significant as compared to the rural students. (2) Economic, aesthetic, social and religious values were found to be significantly different on boy students in comparison to their girl counterparts. But on theoretical and religious values, the boy students were not significant as compared to their girl counterparts. (3) It was found that the difference between mean score of urban boys was in respect of value, i.e. theoretical, economic and aesthetic than that of the rural boys. The mean score of the rural boys and that of the urban boys of these two groups were not significant for social and political values. (4) Aesthetic and religious values were found to be significant on rural girls as compared to their urban counterparts. But other values, i.e. theoretical, economic, social and political were not found to be significant on urban as compared to their rural counterparts. [0683]

KUMARI, L. VIJAYA. 1996. **Value orientation of secondary school teachers and their attitudes towards educational issues.** Ph.D., Edu. *Osmania Univ.* Guide: Dr. P. Sandeep.

Problem: It attempts to study the value orientation of secondary school teachers and their attitudes towards educational issues.

Objectives: (i) To ascertain the value orientation of secondary school teachers, and (ii) to study the attitudes of teachers towards issues in education.

Methodology: The sample of the study comprised 187 teachers from different managements. They were selected through stratified random sampling technique. The tools used included Value Orientation Scale for Teachers by Kulshreshtha and an Attitude Scale. The collected data were treated with qualitative methods.

Major Findings: (1) Professional and progressive values emerged on the top among the teachers'

values followed by humanitarian value, traditional and social values. (2) The teachers' attitudes were also found to be positive towards the educational issues. [0543]

EDUCATIONAL TECHNOLOGY

BHANGOO, SATWANT AND SIDHU, RAJKARNEY. 1997. **Impact of selected audio-visual aids on food hygiene knowledge of school students.** *Trends in Education*, Vol. XXXII(1), 89-96.

Problem: It attempts to study the impact of selected audio-visual aids on food hygiene knowledge of school students.

Objectives: (i) To develop visual aids, i.e. black and white drawings and coloured drawings, and (ii) to study their impact on imparting food hygiene knowledge to rural school students.

Methodology: The sample of the study comprised 90 students, both boys and girls, studying in Class IX, from three co-educational government high schools of Ludhiana district. Three blocks of this district were randomly selected. There were three groups – one control group and two experimental groups. The tools used to collect data were visual aids and an objective type knowledge test. The collected data were treated with mean, SD, 't' test and analysis of variance.

Major Finding: All the three groups differed significantly on gain in knowledge, as well as on retention with E2 gaining the highest, followed by E1 and C groups. [0690]

GAIKWAD, K.D. 1993. **Effect of mastery over theory and planning skills upon teacher-trainees' performance of concept attainment model.** Ph.D., Edu. *Shivaji Univ.* Guide: Prof. Anant Joshi.

Problem: This study investigates the effect on trainees' classroom teaching and his performance in terms of pupils' achievement.

Objectives: (i) To develop self-instructional material on theory and planning skills, (ii) to determine the level of mastery over theory and planning skills of CAM (Concept Attainment

Model), (iii) to develop criteria for testing and mastery learning strategies, (iv) to determine the efficacy of mastery learning strategies, and (v) to determine the effect of training strategies in terms of teaching performance and pupils' achievement.

Methodology: The sample of the study comprised 36 male and female student-teachers. They were randomly selected from a population of 180 students. The tools used to collect the data were Concept Attainment Model by Bruce Joyce, Sansanwal and Sharma, Plan Evaluation Scale (PES), Teaching Analysis Guide (TAG), Willingness Scale (WS) by Passi and Sansanwal, Reaction Scale, Intelligence Test by Mehta and General Mental Ability Test by Gyan Prabodhini, Pune. The collected data were treated with mean, SD, correlation and analysis of variance.

Major Findings: (1) Independent reading of instructional material on theory of CAM had no significant effect on the teacher-trainees' acquisition of theory of CAM. (2) Focused reading and comment lecture created significant difference in the mean performance of Theory (T), and Theory Planning group (TP). (3) The treatment of remedial material produced differential effect in the achievement of theory of CAM among the T and TP groups. (4) Peer tutoring, mastery learning strategy was found most effective for acquisition of expected mastery level. (5) Remedial material had very little effect at the lower extreme end. Student-teachers at the upper extreme end had gained more after using remedial material. (6) Mastery over theory alone could not create considerable variation in the teaching performance of the trainees. The control group and theory group had almost same teaching competency in the real classroom situation. (7) Teaching performance in terms of pupils' achievement of the student-teachers from TP group was significantly higher than that of the control group and theory group. Mastery over both theory and planning favourably affected pupils' concept attainment through increased competency in CAM. (8) Among the general mental abilities, symbolic divergent production, semantic cognition were the major operations involved in acquisition of teaching performance. Figural Cognition had some role to play. (9) In groups T and TP the correlation was curvilinear. The relationship between

teaching performance and pupils' achievement was established upto the optimum level, then it decreased. (10) Trainees from all the groups had almost similar attitude towards CAM. All of them were willing to implement CAM for teaching concepts. [0676]

KAPOOR, PEONY AND VERMA, PREM. 1997. **Aggression in relation to television viewing.** *Psycho-Lingua*, Vol. 27(1), 41-46.

Problem: It attempts to study aggression among adolescents in relation to viewing television.

Objective: To find out the causes of aggression among adolescents in relation to television viewing.

Methodology: The sample of the study comprised 60 (30 high aggressive and 30 low aggressive) adolescents matched on socio-economic status and academic achievement. The tools used to collect the data were H.G. Inventory of Buss and Durkee and a questionnaire. The collected data were treated with 't' ratio and chi-square.

Major Findings: (1) It was found that adolescents low on aggression watched T.V. more regularly than adolescents high on aggression. (2) The more aggressive adolescents watched T.V. for more number of hours and with more concentration. (3) Adolescents high on aggression did not like to be disturbed while watching T.V. (4) Adolescents high on aggression tended to day dream more after watching T.V. than the adolescents low on aggression. (5) Both boys and girls preferred the same kind of programmes on T.V., i.e. mainly informative, films and dramas. [0598]

KARANDIKAR, C.M. 1997. **Evolving a video instructional package to teach balanced diet to the students of Standard VII and studying its effectiveness in terms of the students' achievement.** Ph.D., Edu. The Maharaja Sayajirao Univ. of Baroda. Guide: Dr. R.G.Kothari.

Problem: The present study is aimed at producing a video instructional package to teach balanced diet to the students of Standard VII and studying its effectiveness in terms of the students' achievement.

Objectives: (i) To compare the achievement of students of high SES and low SES, high Junior Index Motivation (JIM) and low JIM and high anxiety and low anxiety groups of students from urban and rural areas studied through video instructional package on immediate and delayed retention test, (ii) to compare the achievement of male and female students on immediate retention test and delayed retention test, (iii) to study the interaction between area, SES, JIM, anxiety and sex on immediate retention test and delayed retention test, (iv) to study the interaction between methods of teaching and SES, JIM, anxiety and sex on immediate retention test and delayed retention test, and (v) to study the interaction between area, methods of teaching and SES, JIM, anxiety, aid, sex on immediate retention test and delayed retention test.

Methodology: The sample of the study comprised 260 students belonging to Vadodara city, who were drawn from 337 schools (212 from urban areas and 125 from rural areas). Further, the schools having video facility irrespective of whether they were located in urban/rural areas formed the experimental group and schools having no video facility irrespective of whether they were located in rural or urban areas formed the control group. They were selected through cluster sampling technique. The tools used to collect the data were Junior Index of Motivation Scale by Jack L. Frymier, Socio-Economic Status Scale and Anxiety Scale by A.S.Patel, an achievement test by the investigator and video instruction package. The collected data were treated with ANOVA and 't' test.

Major Findings: (1) It was found that the students of experimental group with high SES, high JIM and low anxiety in urban and rural areas performed significantly better than the same group with low SES, low JIM and control group on immediate retention test and delayed retention test. (2) The students of experimental group who were exposed to video instructional package showed better performance than that of control group through traditional method of teaching. [0549]

KARANDIKAR, SUHASINI AND KAMAT, V. 1997. **Experimental use of suitable educational**

technology in the teaching of Marathi as first language. *Textbook and Curriculum Research: Annual Research Report 1993-94*, 35-40. Pune: Maharashtra State Bureau of Textbook Production and Curriculum Research.

Problem: The present study tries to find out whether suitable modern educational technology in the teaching and use in learning of Marathi as first language, leads to the achievement of reading-writing objectives to a large extent.

Objectives: (i) To find out how and to what extent, educational technology is used at present, in the teaching of Marathi as first language, (ii) to prepare a teaching-learning plan based on suitable educational technology, for the achievement of the objectives of the Marathi (first language) syllabus, (iii) to implement the plan on an experimental basis and test its effectiveness, and (iv) to make recommendations, based on the results of the experiment, for improving the teaching of Marathi as first language.

Methodology: The sample of the study comprised 62 pupils of Standard V of Experimental Group, studying in Yojana Vidyalaya of Borivli and 60 pupils of Standard V of control group, studying in the Dada Naravne Vidyalaya of Kandivli. The sample also included 132 teachers teaching Marathi to Standard V. The tools used to collect the data were questionnaire and interview schedule. The collected data were treated with percentage and analysis of variance.

Major Findings: (1) The ability to read with understanding, pausing at the right places, and with clear and correct pronunciations was developed to a very small extent. (2) The ability to write legibly, correctly, making proper use of punctuation marks and with proper speed was developed to a little more extent. (3) If suitable educational media were used for teaching silent and loud reading, the abilities concerning them were developed to a great extent. (4) If suitable learning experiences were designed to teach writing, the ability to write legibly and correctly, making proper use of punctuation marks and with proper speed was developed to a large extent. (5) If suitable educational techniques were used in the teaching of Marathi, in the case of ordinary and backward pupils, the abilities

concerning reading and writing were developed to a great extent, but no significant difference in the matter was observed in the case of bright pupils. [0648]

SINGH, AVIAR AND KAUR, AMRIT. 1997. **Impact of television programmes on the socio-psychological behaviour of urban primary school children.** *Psycho-Lingua*, Vol. 27(1), 47-52.

Problem: The present study was designed to assess the impact of TV programmes on the socio-psychological behaviour of urban primary school children.

Objectives: (i) To delineate the positive effect of TV on the socio-psychological behaviour of urban primary school children as perceived by their mothers, and (ii) to examine the perceptions of mothers regarding the positive impact of TV in relation to certain biographical data, such as their age, level of education, family income, number of children and the duration of TV viewed by them.

Methodology: The sample of the study included 320 mothers of the primary school children belonging to Ropar and Patiala districts. From these districts, ten urban primary schools were randomly selected, five from each district. From each of the schools, 16 boys and 16 girls, who viewed TV were randomly selected. The unit of the study was mothers of these students. Tools used to collect the data were questionnaire and a check-list, both of which were prepared by the investigator. The collected data were treated with chi-square and percentages.

Major Findings: (1) There existed no significant difference between the perceptions of younger and older mothers for any of the aspects of behaviour, i.e., alertness, boldness, cheerfulness, bravery, tidiness, self-confidence, friendship, independence, leadership and wisdom. (2) It was found that the level of education influenced the perceptions of mothers in the case of boldness, tidiness, friendship and leadership. However, the level of education of the mothers was not found to have significant effect on these aspects – alertness, cheerfulness, bravery, self-confidence, independence and wisdom. (3) It was observed that the perceptions

were influenced by their level of income in the case of bravery, friendship, independence, leadership and wisdom. But the level of income was not found to have significant effect on alertness, boldness, cheerfulness, self-confidence and tidiness. (4) It was found that the number of children the mothers had, did not influence any of their perceptions related to TV viewing on their children, i.e. alertness, boldness, cheerfulness, bravery, tidiness, self-confidence, friendship, independence, leadership and wisdom of their children. (5) It was found that the duration of TV viewing by them influenced their perceptions only on independence, not on alertness, boldness, cheerfulness, bravery, tidiness, self-confidence, friendship, leadership and wisdom. [0599]

SINGH, BASANT BHADUR. 1994. Effectiveness of U.G.C. country-wide classroom programmes on models of teaching with interactive mode and without talk-back. *The Progress of Education*, Vol. LXIX(4&5), 83-85.

Problem: It studies the effectiveness of UGC country-wide classroom programmes on models of teaching with interactive modes and without talk-back.

Objective: To find out the comparative effectiveness of the UGC country-wide classroom programmes with interaction and without talk-back in terms of achievement of the viewers when pre-test score is taken as a covariate.

Methodology: Model of teaching subjects specific available B.Ed. students (Graduate) constituted the sample of the study. After viewing each programme an objective type test was constructed by the investigator to collect the data. The collected data were treated with ANCOVA.

Major Findings: (1) It was found that adjusted mean achievement on the test of the group with interactive mode and without talk-back differed significantly from each other. (2) The adjusted mean achievement score of the interactive group was significantly higher than the mean achievement score of the group without talk-back. [0633]

SINGH, OM PRAKASH. 1997. Creativity correlates

of science teacher behaviour in micro-teaching situations. *Psycho-Lingua*, Vol. 27(2), 89-94.

Problem: The present study aims at studying the creativity correlates of science teacher behaviour in micro-teaching situations.

Objective: To compare the coefficients of correlation of the scores of non-verbal creative thinking and the behaviour ratios of science student-teachers trained through micro-teaching technique and traditional technique of teacher training.

Methodology: The sample of the study comprised 44 science student-teachers, 22 from control group and 22 from experimental group, drawn from R.H.S. Degree College, Singramau, Jaunpur, admitted for B.Ed. degree for the session 1987-88. They were randomly selected. The tools used to collect the data were science classroom teaching competence-cum-observation schedule by the investigator, Flander's Interaction Analysis and Non-verbal Test of Creativity of Baquer Mehdi. The collected data were treated with 't' test and coefficient of correlation.

Major Findings: (1) The non-verbal creative thinking was negatively related to teacher talk but the relationship was negligible. Further, micro-teaching could be used to enhance this relationship to a high degree as it was not significant at any level of confidence at pre-test. (2) The indirect teacher talk had not shown any relationship with non-verbal creative thinking but it could be increased to a high degree when the student-teachers were trained through micro-teaching technique because the coefficient of correlation between Indirect Teacher Talk and non-verbal creativity had been found to increase and become significant. (3) The direct teacher talk was negatively related to the non-verbal creative thinking. Higher non-verbal creativity lowered down direct teacher talk. This relationship could be increased to a high degree in the same direction with the introduction of micro-teaching technique. (4) The higher the non-verbal creative thinking, the higher the chances of pupil participation in the classroom. Micro-teaching technique for teacher training could upgrade this relationship to a high degree.

(5) Higher non-verbal creativity caused lesser confusion or silence in the classroom. Micro-teaching as well as traditional technique, both could play effective role in avoiding silence or confusion in classroom. [0622]

SURWASE, M.P. AND CHINCHOLKAR, R.S. 1997. The use of educational technology in the teaching of geography to Standard V. Textbook and Curriculum Research: Annual Research Report 1993-94, 106-109. Pune: Maharashtra State Bureau of Textbook Production and Curriculum Research.

Problem: The present study is designed to study the use of educational technology in the teaching of geography to Standard V.

Objectives: (i) To study whether the teachers are aware of the educational technology, (ii) to study which types of educational technology are useful in the teaching of geography, and (iii) to see whether the teachers are making use of educational technology in their teaching.

Methodology: The sample of the study comprised 40 schools, covering primary and secondary schools in the academic year 1993-94, which were selected by using stratified random sampling method from Osmanabad taluka. Two questionnaires, one each for headmasters and teachers, were prepared to gather the relevant information.

Major Findings: (1) Visual aids were available in many schools but audio and audio-visual, aids were not available in the schools. (2) Geography teachers were not trained in using visual audio and audio-visual aids. (3) The schools had purchased visual aids but very few audio or audio-visual aids had been purchased. (4) Teachers were not aware of educational technology. (5) Teaching of geography by using various teaching models and by using audio-visual aids was found more effective in many respects; especially difficult concepts in geography could be explained to students easily using these aids. [0668]

TEACHING STRATEGIES

comparative study of teaching methodology employed by teachers before and after the use of the teacher's handbook. Textbook and Curriculum Research: Annual Research Report 1993-94, 21-24. Pune: Maharashtra State Bureau of Textbook Production and Curriculum Research.

Problem: This study attempts to assess the usefulness of the teaching methodology after making use of teacher's handbook by the teachers.

Objectives: (i) To evaluate the teaching done by teachers using the teacher's handbook, (ii) to find out the difference in the achievement of pupils taught by teachers who use the handbook and those taught by teachers who do not use it, and (iii) to study the difficulties felt by teachers in using the handbook.

Methodology: The sample of the study comprised 100 students. Of these, 25 boys and 25 girls were subjected to experimental group and an equal number of boys and girls were subjected to control group. This sample of the study also included 19 teachers. They were randomly selected from the Municipal Schools, privately managed schools located in Sangli city. Tools used to collect the data included questionnaire and interview schedule.

Major Findings: (1) The average percentage of marks obtained by pupils in the experimental group was 75.4, while that obtained by pupils in the control group was only 47.48. (2) The use of teacher's handbook by teachers made their teaching more effective and resulted in the improvement in pupils' achievement. (3) The use of teacher's handbook by teachers made the objective of the lesson clear to pupils. (4) The use of teacher's handbook by teachers improved their pedagogic knowledge and skills. (5) There were no defects in the teacher's handbook for teaching Marathi in Standard IV. [0643]

SHARMA, P. 1997. Impact of interventional strategies on attainment of MLL competencies in multigrade schools. Independent study. Mysore: Regional Institute of Education. (DPEP study).

ADSOOL, R.K. AND DESAI, R.G. 1997. A Problem: This study attempts to explore the

impact of using selected teaching and learning strategies suggested in the handbook for primary school teachers on multigrade teaching.

Objectives: (i) To develop handbook for multigrade primary school teachers on how to use selected teaching and learning strategies to develop MLL competencies in first language, mathematics, environmental studies (EVS) - I and II among the students studying in these schools, (ii) to know the results of pre- and post-testing in the above context areas, and (iii) to find out sex and grade differences in the five selected multigrade schools of Kolar and Mandya districts of Karnataka.

Methodology: The sample of the study comprised 130 students (72 boys and 58 girls) of Classes II, III and IV of five multigrade schools of Kolar and Mandya districts. The tools used to collect data were tests based on selected MLL competencies and interviews.

Major Findings: (1) Prepared teaching and learning materials helped multigrade students to learn MLL competencies in Kannada, mathematics, EVS-I and II better. (2) Orientation of multigrade teachers in using peer tutoring, monitorial assistance, self-learning material and direct teaching also had positive impact on organisation of teaching and learning material in multigrade schools. (3) Teacher's academic background and interest was more influencing factor in helping them attain MLL competencies. (4) Weekly timetable planning and selective sitting arrangement of the students also contributed towards better learning. [0576]

TEACHER EDUCATION — PRE-SERVICE AND IN-SERVICE

AGARWAL, V.P. 1996. **Comparative study of teacher training models under SOPT and DPEP programmes.** Independent study. *Ajmer: Regional Institute of Education.* (DPEP study).

Problem: This study examines the quality of in-service teacher training programmes for primary school teachers.

Objectives: (i) To study the quality of INSET in relation to (a) coverage of content,

(b) transactional strategies, and (c) achievement on language teaching modules, and (ii) to ascertain the extent of transmission loss from Resource Persons (RPs) level of training to the subsequent level of teacher's training.

Methodology: The sample of the study comprised 283 subjects covering two groups of RPs training (N112) and four groups of teachers' training programme (N171) under Special Orientation Programme for Primary School Teachers (SOPT) and District Primary Education Programme (DPEP) in the States of UP and Haryana. They were randomly selected. Observation schedule and achievement test in language teaching were used as tools to collect the data.

Major Findings: (1) Considerable amount of content was not transacted in the training programmes for RPs under SOPT (46.6 %) and DPEP (39.6 %) programmes. (2) Further loss was observed at teachers' level as more contents were left out in SOPT (56.8%) and DPEP (49.6 %) programmes. (3) Transactions during training were mainly through lectures and discussions. Group work/activities were too less. Demonstration of activities were rarely done at both levels of training. (4) Training made significant gain in achievement of teachers on language teaching modules. (5) The initial loss (39.6 %), transmission loss (18.2 %) and total training loss (57.8 %) under DPEP programme was less than the initial loss (46.9 %), transmission loss (19.3 %) and total training loss (62.2 %) under SOPT programme. Transmission loss was seen from the RP level of training to the subsequent level of teachers' training. (6) DPEP training programmes, compared to the SOPT programme, provided better quality of training in terms of (a) more coverage of content of the instructional package, (b) adoption of child-centred activities, (c) more gain in achievement in teaching of language, and (d) less loss of information. [0585]

✓ AGARWAL, A.; GREWAL, J.S. AND JAGWANI, V. 1996. **Development and validation of needs assessment survey technique for the identification of training needs of primary school teachers in a DPEP district.** Independent study. *Bhopal: Regional Institute of Education.* (DPEP study).

Problem: This study aims at identifying various expressed and assessed training needs of primary school teachers with a view to validate a needs assessment survey technique.

Objectives: (i) To identify various types of expressed training needs of primary school teachers in four areas —teaching of language, mathematics, environmental studies and pedagogical areas, (ii) to identify the assessed training needs in mathematics and environmental studies, and (iii) to validate the needs assessment survey for the identification of training needs for future use by comparing expressed training needs and assessed training needs.

Methodology: The sample of the study comprised 116 primary school teachers (70 male and 46 female) drawn from the primary schools of three districts of Madhya Pradesh. The tools used to collect the data included teachers' responses obtained on check lists. The data were analysed using the weighted score technique and percentages.

Major Findings: (1) In language the topics getting higher priority were reading, pronunciation, intonation and punctuation marks. (2) The higher range of Weighted Score Technique (WST) on the mathematics inventory reflected that the teachers were not adequately prepared to teach the subject. (3) Highest expressed needs by the teachers were in geography related components of the environmental studies. (4) Teachers had no understanding of the concept of EVS. (5) Teachers found it most difficult to make seating arrangement in multigrade situation and then teaching different classes simultaneously. (6) All the weighted percentage scores for the pedagogical needs of the sampled primary school teachers were higher as compared to the needs in language, mathematics and environmental studies. (7) 80% of the teacher's preference was for content enrichment followed by methods of teaching (application level). (8) Primary school teachers required special content enrichment training courses so that they could come up to the level at which they were expected to operate. (9) Comparison of the expressed and assessed needs in arithmetic and environmental studies showed congruence. [0582]

of training guidelines for pre-primary teachers. *The Progress of Education*. Vol. LXIX(4&5), 86-88.

Problem: This study is an attempt to develop training guidelines for pre-primary teachers of Udaipur city, regarding care and education of children in early childhood years.

Objectives: (i) To find out basic knowledge and skills of pre-primary teachers regarding care and education of children in early childhood years, and (ii) to suggest the pre-service and in-service training guidelines based on preference given by subjects to improve the knowledge and skills of pre-primary teachers regarding care and education of children in early childhood years for promoting quality of their services.

Methodology: The sample of the study comprised 76 pre-primary teachers of private/non-government/non-aided institutions of Udaipur city. The investigator developed a semi structured questionnaire to collect the data for the study. The collected data were analysed qualitatively and quantitatively.

Major Findings: (1) It was found that pre-primary teachers did not possess the knowledge that is essential for the job which they were handling. This was because of lack of training in the specialised fields. (2) Most of the pre-primary teachers were untrained. (3) It was found that none of the correct response was received about developmental lack and a very few correct responses were received about developmental characteristics, pre-school curriculum models and philosophies, programme, planning selection of games for children. [0634]

MOHAPATRA, J.K. 1996. **Identification of intervention areas for improving teaching - steps towards teacher empowerment.** Independent study. *Bhubaneswar: Regional Institute of Education*. (DPEP study).

Problem: The study aims at identifying intervention areas for improving teaching of EVS-II.

Objectives: (i) To develop a diagnostic tool for identifying the intervention areas for improving teaching efficiency of EVS-II, and (ii) to administer the tool on primary teachers and

HIRAN, RITU AND DAVE, C. 1994. **Development**

specify the intervention areas in the Global Common Core Format and Subject-specific format.

Methodology: The sample consisted of 131 teachers drawn from 51 schools located in urban, rural and under-privileged sectors of the society. A tool with 103 items was developed to collect the data.

Major Findings: (1) About 7 % of the teachers had not undergone at least a C.T. course. (2) About 7 % of the teachers were non-matriculates. (3) About 97 % of the teachers did not have a science background (i.e., passed +2 with science). (4) About 64 % of the teachers had not attended any orientation/training programme within the last 5 years. (5) About 60 % of the teachers did not know anything about MLL. (6) About 51 % of the teachers had not undergone SOPT training with special reference to child-centred, activity-based, joyful teaching-learning structures. (7) About 70 % of the teachers did not know how to set a diagnostic test item. (8) About 70 % of the teachers had not seen the science kit box. They did not know how to use it. (9) The following concept domains were identified as hard spots for the teachers. (a) Class-III: Health and Hygiene, Characteristics of living beings in the context of animals and plants, Difference between man-made and natural objects and Difference between root and stem. (b) Class-IV: Functions of root, stem and leaf, Rotation of the moon, Functions of heart, lungs and brain, Season and weather. (c) Class-V: Occurrence of day and night in relation to rotation of celestial bodies, Light proportion, Uses of water, Cloud formation, Pollution of water, Producers of food, Machine and its uses, Work, Specific gravity and its calculation in simple cases, Maintenance of balance between the percentage of oxygen and carbon-di-oxide in the atmosphere. [0583]

SHAHAPUR, NAGAPPA P.; DORASAMI AND VENKATAIAH, N. 1996. **Perception of leadership styles and satisfaction of different need areas of teachers in Mysore city college.** *Experiments in Education*, Vol. XXIV(5), 69-79.

Problem: This study attempts to find out the relationship between two styles of leadership—initiating structure and consideration — and

the satisfaction reported on five different needs areas, namely, physical, social, esteem, autonomy and self-actualization.

Objective: To study the relationship between satisfaction of need areas (physical, social, esteem, autonomy and self actualization) and the two styles of leadership (initiating structure and consideration) with reference to management, sex and years of experience of the college teachers.

Methodology: The sample of the study comprised 124 teachers covering lecturers, readers and professors, drawn from four colleges of the Mysore city. Their age ranged between 24 to 58 years. The tools used to collect data were Leader Behaviour Description Questionnaire (LBDO) and Job Satisfaction Inventory by Jayalakshmi Indiresan. The collected data were treated with coefficients of correlation.

Major Findings: (1) It was found that satisfaction of different need areas, namely, physical, social, esteem, autonomy and self-actualization were differentially related to the two styles of leadership namely, initiating structure and consideration. (2) With regard to government college teachers, it was found that some correlations between the perceived supervisory styles and reported satisfaction of need areas were positive and some were negative. Their correlations were not significant. (3) With regard to private college teachers, it was found that the correlations between social needs, autonomy needs and initiating structure were positive and significant. In the case of correlations between the need areas and the supervisory style of consideration, they were positive but not significant. (4) With regard to lady college teachers, it was found that all correlations between need areas and the supervisory style initiating structure were positive, whereas, the correlations between the need areas and supervisory style of consideration were positive in the case of physical and social need satisfaction and negative with esteem, autonomy, self-actualization need satisfaction. (5) With regard to male college teachers, it was found that the correlations between all the five need areas and the supervisory style initiating structure were positive and significant, whereas the correlations between physical, social, esteem

and autonomy need areas and supervisory style consideration were positive but not significant. (6) With regard to college teachers having teaching experience of less than ten years, it was found that the correlations between the need areas – physical and social needs – and the leadership style initiating structure were positive and significant and the correlation of other need areas were positive but they were not significant. The correlations between different need areas and the leadership style consideration were positive but not significant. (7) With regard to college teachers having teaching experience more than ten years, it was found that the correlations between different need areas and the leadership style initiating structure were positive and significant in the case of physical and autonomy needs, whereas the correlations between different need areas and the leadership style 'consideration' were negative except in the case of social needs. [0635]

SINGH, BAKHSISH AND KHALWANIA, NAKSHATAR SINGH. 1994. **Educational level of teachers of government primary schools in district Patiala.** *The Progress of Education*, Vol. LXIX(4&5), 80-82.

Problem: This study attempts to assess the educational level of government primary school teachers of Patiala district.

Objectives: (i) To find out the education level of teachers teaching in government primary schools in district Patiala, and (ii) to find out whether the female teachers in government primary schools in district Patiala are better qualified than their male counterparts.

Methodology: The sample of the study comprised 113 primary government school teachers of district Patiala. The relevant data were collected from the seminars conducted at DIET, Nabha and secondary data were collected through official records. They were treated qualitatively.

Major Findings: (1) It was found that 55.76% of the teachers of government primary schools either did not try to improve their academic qualifications after joining the service as teacher, or tried but failed. (2) Corresponding percentage for lady teachers was higher than the

corresponding percentage for male teachers. (3) The percentage of women teachers who had improved their qualifications in respect of academic degree was lower except for the Gyani/Prabhakar degree. (4) It was found that women teachers were generally more particular about their pay than their male counterparts. [0632]

SRIVASTAVA, G.N.P. 1996. **Study of DPEP teachers training programme — M.P. and Maharashtra.** Independent study. *Bhopal: Regional Institute of Education.* (DPEP study).

Problem: This study centres around the assessment of teacher training programmes provided under DPEP in 19 districts of Madhya Pradesh and 5 districts of Maharashtra as a strategy for capacity building among teachers.

Objectives: (i) To identify variations in the training programmes of the states covered under DPEP teachers training programme, (ii) to study the improvement in teaching skills as a result of training programmes, (iii) to study the problems in implementation, and (iv) to identify innovative practices, if any.

Methodology: The sample of the study comprised 111 respondents including persons from State Resource Group (SRG), District Resource Group (DRG) and Block Resource Group (BRG), trainees, teachers, parents and Village Education Committee (VEC) members. They were drawn from 7 districts of M.P. and 3 districts of Maharashtra. In addition, 60 schools and 220 students were also observed in classroom settings through a structured observation schedule. The data were collected using questionnaires and personal interviews.

Major Findings: (1) The SCERT training programme emphasised child centred and learning centred teaching. (2) Story telling, poetry, songs, plays, group games, toy making, creative activities, body control exercises, manipulation of objects and pictures were used for teaching in lower classes. (3) Dakshasikshan package stressed on MLL competencies and their evaluation. (4) Maharashtra had a 3-tier training system, viz., SCERT - SRG and DRG - BRG - teachers and headmasters. (5) Training programmes in Maharashtra concentrated on (a) competency based teaching, (b) joyful

learning, (c) material development, (d) planning, (e) girls' education, (f) puppetry, and (g) action research. (6) Training components in Madhya Pradesh programmes included (a) competency based teaching, (b) school readiness programmes, and (c) personality development through individual and group activities. [0584]

VASANTHI, R. AND ANANDHI, E. 1997. **A study of some factors affecting teacher effectiveness of B.Ed. student-teachers.** *The Progress of Education*, Vol. LXXI(6), 137-140.

Problem: The present study has been undertaken to throw some light on the influence of some factors on teacher effectiveness of B.Ed. student-teachers.

Objectives: (i) To examine the role of intelligence, anxiety, self-concept, attitude towards teaching and achievement-motivation on teacher effectiveness of B.Ed. student-teachers, (ii) to examine and identify the factors favourable for high teacher effectiveness, and (iii) to compare the influence of these factors on teacher effectiveness of men and women teacher-trainees.

Methodology: The sample of the study comprised 417 B.Ed. student-teachers (79 men and 338 women) of the 6 Colleges of Education in the city of Madras. The tools used to collect the data were The Standard Progressive Matrices by J.C.Raven, Sinha's Anxiety Scale, Self-Concept Inventory of M. Basavanna, Attitude towards Teaching Scale by P. Ponnambalam and H. Visvesaran, Sentence Completion Test and Achievement Motivation by Shantamani and Hafeez. The collected data were treated with inter correlation matrix, multiple regression analysis and F-ratio.

Major Findings: (1) It was found that the factor of intelligence had high positive relation with teacher effectiveness among the B.Ed. students. (2) The factor of intelligence had been found to be 51 %. The positive correlation indicated that higher the intelligence the better was the teacher effectiveness as perceived by the teacher educators. (3) It was found that among the male

student-teachers, the inter-correlation matrix showed a significant correlation between teacher effectiveness, intelligence and achievement-motivation, 40 % attributed by intelligence while achievement-motivation, self-concept, attitude towards teaching and anxiety contributed negligibly. (4) The inter-correlation matrix of women B.Ed. student-teachers, intelligence, self-concept and attitude towards teaching were found to be significantly correlated in the positive direction with teacher effectiveness. [0686]

VERMA, B.P. 1997. **Learning styles of in-service teachers: A study of disciplinary differences.** *Recent Researches in Education and Psychology*, Vol. 2(3&4), 80-83.

Problem: The study examines whether disciplinary differences do exist in the learning styles of in-service secondary school teachers in Indian socio-cultural ethos.

Objective: To find out the differences in learning styles of in-service secondary school teachers when categorised by discipline area taught viz., science/maths, language and social studies.

Methodology: The sample of the study comprised 80 secondary school teachers of district Shimla (Himachal Pradesh). Forty teachers belonged to science/maths, 20 teachers belonged to language and 20 teachers were from social studies. The tool used to collect the data was Inventory of Learning Processes (ILP) by Schmeck, Ribich and Ramanaih. The collected data were analysed by 't' test.

Major Findings: (1) It was found that science/maths teachers exhibited higher level of deep processing than social studies teachers but lower level of elaborative processing than language teachers. (2) On fact retention, all the three groups of teachers were found to be alike. (3) Further, science/maths teachers and social studies teachers were found to be significantly higher than language teachers on methodical study. Thus, some disciplinary differences were noticed in learning styles of secondary school teachers. [0553]

VOCATIONAL AND TECHNICAL EDUCATION

BHATNAGAR, T.N.S. 1988. A study of some cognitive and motivational factors of the professional students. Independent study. *National Council of Educational Research and Training.*

Problem: The present study attempts to explore the relationship between cognitive and motivational factors of the professional students.

Objectives: (i) To study cognitive and motivational factors of the student-teachers, medical students and engineering students in a comparative manner, (ii) to study the relationship between cognitive and motivational factors as well as achievement of the three groups of students, and (iii) to compare the extent of variation in respect of criterion variables through cognitive and motivational predictor variables in the groups of student-teachers, medical students and engineering students.

Methodology: The sample of the study comprised 281 professional students comprising of 68 final year of B.Tech/M.S. Engineering students from the Indian Institute of Technology, New Delhi, 167 B.Ed. students of Delhi University and 46 final year of M.B.B.S. students from the All India Institute of Medical Sciences, New Delhi. The tools used to collect data were Eight tests of Intellectual Factors of Ideation Fluency, Originality and Semantic Spontaneous Flexibility developed by French and others based on Guilford Model of Intellect; Abstract Reasoning Ability Test by Bennett and others; Test of General Intelligence by Cattell; and Motivational Analysis Test by Cattell and others. The collected data were treated with mean, median, SD, 't' test, correlations and multiple regression.

Major Findings: (1) As regards engineering group, it was found to be superior to all groups (except in abstract reasoning). Medical students stood second and B.Ed. students third. In the abstract reasoning ability, medical students were first, followed by engineering students and B.Ed. students. (2) As regards motivational factor, engineering students stood first in Home parental sentiment (Ho), Sweet spouse sentiment (Sw) and

Assertiveness (As) and the third in the Super-ego sentiment (Se). Medical students were first in the case of Career sentiments (Ca), Fear erg (Fr), Narcissism comfort erg (Na), Mating erg (Ma), Pugnacity-sadism erg (Pg) and Self-concept sentiment (Ss) and the second in Home-parental sentiments (Ho), Sweet spouse sentiment (Sw), Assertiveness erg (As) and the Super-ego sentiment (Se) and the student-teachers stood first in Super-ego sentiment (Se), and the third in remaining nine motivational variables. (3) On the cognitive and motivational factors, similarities and differences were found among the medical students, student-teachers and engineering students. (4) It was found that the abstract reasoning ability turned out to be the best predictor of achievement in the case of student-teachers and medical students. But in the case of engineering students, cognitive factors of originality turned out to be the best predictor. [0557]

BRAHMBHATT, INDIRA A. 1994. A critical inquiry in the programme of socially useful productive work in Standards VI and VII of the primary schools of Gujarat state. Ph.D., Edu. *Shreemati Nathibai Damodar Thackersey Women's Univ.* Guide: Dr. K.G. Desai.

Problem: The study attempts to critically evaluate the programme of socially useful productive work in the VI and VII Standards of primary schools of Gujarat state.

Objectives: (i) To collect information about the various activities carried out under socially useful productive work programme in primary schools of Gujarat state, (ii) to know the objectives as laid down by the framers of the socially 'useful productive work and expectations of the government in fulfilling them, (iii) to collect opinions of the students, the subject teachers, the principals so as to know how the programme has been implemented and to what extent it has been successful, (iv) to know their difficulties in the proper execution of the subject, (v) to get valuable suggestions from the subject teachers and principals concerned with programme for its proper implementation, and (vi) to make a proper diagnosis of the whole malady and to

pin-point the remedial measures for fulfilling the expectations, as laid down under this programme.

Methodology: The sample of the study comprised 6450 subjects covering 150 principals, 300 teachers and 6000 students of Standards VI and VII from 150 private, public, rural and urban schools of Gujarat state. The sample was selected through stratified cluster sampling method. The tools used to collect data were questionnaire and opinionnaire. The collected data were treated qualitatively.

Major Findings: (1) The main activities covered under socially useful productive work programme were craft/paper work, sewing, gardening, carpentry, spinning and weaving, agriculture, preparation of soap and detergent, tooth powder, vaseline, painbalm, chalk, clock repairing, wire knitting, etc. (2) The tools and materials were brought by the children from their home in urban areas, whereas supplied by the schools in the rural areas. (3) Lack of provision of separate room for the smooth conduct of the activities was a major problem in almost all the schools, except a few in the urban areas. (4) Grant, though given to the sponsored schools by the government, was surprisingly not fully utilised by them, while, urban private schools created necessary funds for these activities or the expenses were borne by the respective managements. (5) Discussion/explanation of the activities to be taught under the subject, followed by demonstration was the method used to impart knowledge of the subject. (6) Time allotted to this activity was one period of 30 to 40 minutes per day and it varied from school to school. (7) No common procedure of evaluation was followed by the schools. Majority of them had practical and written examination. Period of evaluation also varied from school to school. [0610]

Kaur, Prabhjot and Sangha, G.S. 1997. Impact of 'earn while you learn' projects. Trends in Education. Vol. XXXII(1), 80-84.

Problem: This study attempts to examine the impact of 'earn while you learn' projects on students.

Objectives: (i) To study the working of students

in the crop production projects, (ii) to find out the problems faced by the students in the crop production course and their opinion regarding this scheme, and (iii) to explore the crop rotations followed and profits earned by the students in the crop production course under the 'earn while you learn project'.

Methodology: The sample of the study comprised 75 students of B.Sc. Agri. (Hons) final year class from College of Agriculture, PAU, Ludhiana. The tool used to collect the data was structured questionnaire. The collected data were treated with percentages.

Major Findings: (1) As regards the size of the groups, it was found that in 66.66 % cases the size of the group of the students who worked under the scheme was "four", in 26.66% cases the group was of "three" students and in 6.66% cases the group was of "six" students. (2) It was found that in 82.66 % of the cases, the size of the field allowed to the students was one acre. In 8.0 % cases, the size of the field was 0.75 acre, whereas in 9.33 % cases, the size of the field was 1.50 acres. (3) As regards profits earned and crop rotations followed, it was found that in 45.33 % cases the profit ranged from Rs.800 to Rs.2000, in 36.0 % cases the profit was from Rs.2001 to Rs.3200 and in 18.60 % cases the profit was from Rs.3201 to Rs.4400 per year per group of students. In 56.0%, 21.33%, 13.54% and 9.33% cases the students followed wheat-bajra-gobhi, sarson, wheat-rice, and wheat-pulses, respectively. Further, 65.33 % of the students confessed that they employed hired labour in the crop production project. (4) As regards problem faced by the students, it was found that 30.66 % of the students reported that they faced problems during irrigation, 21.33 % in input procurement, 20.0 % in sowing, 13.33% in land preparation, and harvesting, 12.0 % in thrashing, 8.0 % in watch and ward, 5.33 % in fertilizers application and 5.33 % in marketing. (5) It was found that 93.33 % of the students were satisfied with the grades earned and 89.33% were in favour of continuing this scheme. Further, 86.66 % of the students were satisfied with the site of the plot and 81.33 % of the students reported that they required new knowledge and skills during these projects. [0689]

SPECIAL EDUCATION

BHARDWAJ, R. 1997. **Adequate depth of feeling and sex as correlates of the need for achievement among handicapped and non-handicapped children.** *Disabilities and Impairments*, Vol. 11(2), 73-80.

Problem: The present study is an attempt to investigate the effects and interrelations between adequate depth of feeling—a competence related to emotional competence—sex and types of children (handicapped and non-handicapped) while affecting the need for achievement.

Objectives: (i) To study the contributing effects of adequate depth of feeling on the need for achievement, (ii) to study the masculine differences as regards the need for achievement, (iii) to study the differences among cerebral palsied, congenitally blind and non-handicapped children and the need for achievement, and (iv) to study the interactive relations among three Ivs. of the study both at bi-variate and tri-variate levels.

Methodology: The initial sample comprised 600 children of both sexes (boys and girls). Out of these, 200 children were cerebral palsied, 200 children were congenitally blind and 200 children were normal. But the final sample of 240 children were selected through multi-staged sampling technique. Their age ranged between 8 to 14 years. The tools used to collect the data were Emotional Competencies Scale by Sharma and Bharadwaj, and Personal Preference Schedule by Tripathi. The collected data were treated with ANOVA.

Major Findings: (1) Adequate depth of feeling promoted the need for achievement in general and specially in non-handicapped boys and demoted the need for achievement in congenitally blind boys. (2) The need for achievement was masculine in both non-handicapped children imbued with high level of adequate depth of feeling and in cerebral palsied children having high level of adequate depth of feeling. (3) the need for achievement was feminine in congenitally blind children who were imbued with high level of adequate depth of feeling. (4) In comparison to non-handicapped, the cerebral palsied children had greater need for

achievement in general. (5) In comparison to non-handicapped, the congenitally blind children had greater need for achievement in general and in those boys who were imbued with low level of adequate depth of feeling and in those girls who were imbued with high level of adequate depth of feeling. (6) In comparison to cerebral palsied, the congenitally blind children had greater need for achievement in girls who were imbued with high level of adequate depth of feeling. (7) In comparison to congenitally blind children, the cerebral palsied children had greater need for achievement in those boys who were imbued with high level of adequate depth of feeling. [0631].

EDWIN, SUNDER. J. 1997. **Promoting learning in secondary level science concepts through self contained modules for slow learners.** Ph.D., Edu. *Gulbarga Univ.* Guide: Dr Syeda Akhtar.

Problem: This study attempts to investigate the influence of self-learning modules on slow learners at secondary level.

Objectives: (i) To establish significant relationship between expected and actual output of the slow learners, (ii) to find out the effectiveness of the material in terms of attaining mastery level and reaction of students, and (iii) to develop self-contained modules for concepts in science suitable for slow learners at the secondary level.

Methodology: The sample of the study comprised 600 children of secondary level. The relevant data were collected using Raven's Progressive Matrices and Cumulative Record of School Children. The collected data were treated using mean, SD and 't' test.

Major Findings: (1) It was found that there was a significant relationship between the expected and actual output of the slow learners after administering the self contained modules for slow learners. (2) A polygon clearly exhibited the students mastery in the subjects taught with the help of modules. (3) Students showed positive attitude towards the self contained modules by answering the questionnaire. (4) It was found that the self contained modules were suitable for slow learners. [0568]

GUPTA, S.K.; CHUGHTAI, I.B.; GREWAL, J.S.; JAIN, V.K.; MALVIYA, R.; KHARE, S. AND MALVIYA, P. 1996. **A study of the incidence and nature of learning disabilities at the end of Class II and to evolve preventive strategies.** Independent study. Bhopal: Regional Institute of Education. (DPEP study).

Problem: This study attempts to examine the incidence and nature of learning disabilities towards the end of Class II in language and arithmetic.

Objectives: (i) To find out the incidence rate of children with learning disabilities in schools of Sehore block of Madhya Pradesh, (ii) to develop a tool to study the nature of learning disabilities in Hindi and arithmetic, and (iii) to evolve strategies to enhance the capability of classroom teachers in preventing learning disabilities.

Methodology: The sample of the study comprised 20 learning disabled children each in Hindi and arithmetic. Two diagnostic tests were used to collect the data. The data were analysed using descriptive and inferential statistics.

Major Findings: (1) The incidence of learning disabled children in Grade III was found to be 7% in case of government primary schools of Sehore. (2) All children displayed deficit in Hindi, particularly in written language, oral reading, and recognition of words and sentences. (3) Listening comprehension was found better than reading comprehension. (4) Factual listening comprehension was better than inferential listening comprehension. (5) Poor copying problem emerged as a major area of deficit. (6) Understanding and use of spoken language was found better than that of written language. (7) Potential dialect interference effect on various components of Hindi language was observed. (8) Poor attendance of sample children and low educational and occupational status of parents was found. (9) In arithmetic, the sampled children showed deficiency in arithmetic operations, seriation, visual-spatial orientation, auditory sequential memory, concept formation, verbal, numerical, temporal relationship and visual-auditory association. (10) None of the children, irrespective of locale and gender, could reach the mastery level of 80%. Their achievement in terms of MLL was

found to be 50/50 only. [0587]

MANI, BALA. 1996. **The effectiveness of specific learning strategies in the acquisition of vocational tasks by adults with severe mental retardation.** Ph.D., Edu. Jawaharlal Nehru Univ. Guide: Prof. Sushila Singhal.

Problem: This study is designed to assess the effectiveness of specific learning strategies in the acquisition of vocational tasks by adults with severe mental retardation.

Objectives: To investigate; (i) whether severely mentally retarded individuals can be trained for a complex vocational task such as the assembly of a ball point pen, (ii) whether such individuals can be made to learn to focus on the task if the information is presented to them in visual and acoustic form, (iii) whether such individuals retain and store information if the learning material presented to them is well organized (in a sequential order, broken into several steps and vividly presented), (iv) whether the level of IQ of the individual in the range of severe mental retardation impairs his/her competency on the job, (v) whether all such individuals respond equally well to different modes of learning, such as the visual mode, the auditory mode or the combined visual and auditory modes, (vi) whether these individuals progress at the same rate through successive trials in the acquisition of a skill, and (vii) whether these individuals living in isolated environments such as the Group Homes perform better on vocational skills than the severely mentally retarded individuals living with their families and attending day schools.

Methodology: The sample of the study comprised 50 individuals with severe mental retardation. Their age ranged between 18-35 years. They were selected from two cities of Delhi and Bangalore. The tools used to collect data were behavioural observations, interviews and trials in sequences for achieving accuracy on the task. The collected data were treated with percentages, chi-square, ANOVA and 't' test.

Major Findings: (1) It was observed that the severely mentally retarded individuals had the potential to learn a vocational task. (2) It was found that the learning material presented in

visual and acoustic forms facilitated learning and the absorption of the information. (3) Learning was found to be facilitated among the severely mentally retarded individuals when the material was systematically organized. It enabled them to retain and store information. (4) It was found that individuals having a low IQ in the range of severe mental retardation could achieve the same level of competence as individuals having a relatively higher IQ. (5) All severely mentally retarded individuals did not respond equally well to different modes of learning. They learnt best through the mode that they preferred. (6) All individuals in the range of severe mental retardation did not progress at the same rate. They operated with wide variations in the time taken to respond to a given stimulus. (7) Severely mentally retarded individuals living in Group Homes performed better on the task than those living with their families and attending day schools. [0617]

ADULT, CONTINUING AND NON-FORMAL EDUCATION

SHARMA, S.P.; GUPTA, V.P. AND THAKUR, P. 1996. **Developing a motivational strategy to enhance the enrolment of working out-of-school children in the age group 6-14 years.** Independent study. Bhopal: Regional Institute of Education. (DPEP study).

Problem: This study examines the living styles of urban slum dwellers and the educational needs of their working children in the age group of 6-14 years who are out of school.

Objectives: (i) To identify the most impoverished group of families residing in urban slums of Bhopal city, (ii) to study their life style with a view to learn their attitude towards education of their children, (iii) to ascertain the views of children regarding education and work, (iv) to ascertain the views of the employers of these children about their education, and (v) to develop educational strategies suitable for these children.

Methodology: The sample for the study consisted of 50 children, 50 parents and 25 employers. Questionnaires were used to collect the data.

Major Findings: (1) Most of the working children

were in the age group of 10-12 years. Very few were in the age group of 6-10 years and 13-14 years. (2) About 60 % of these children had been to school at some point of time; they dropped out due to various reasons. Only 4 % of them had never been to school. (3) Most of them preferred morning hours from - 8-10 a.m. for studies. Evening hours were inconvenient as they got tired from work during the day. However, those starting work in early hours preferred evening hours - from 8-10 p.m. (4) All the children were keen to restart/start learning, if situations permitted. (5) These children had developed varied interests based on their work environment. Most of them spent their evenings watching TV. (6) During holidays they liked playing games. They also enjoyed the company of their friends and talking to them. (7) Children had to work because (a) it was necessary for them, (b) they had dropped out of school and parents wanted them to be gainfully employed, (c) they could not afford the educational expenses, (d) parents were illiterate and could not complete formalities for admission to school, and (e) school authorities showed non-cooperative attitude. (8) Employers were willing to extend as much cooperation as required to help educate these children. (9) Parents wanted their children to learn employable skills in schools. (10) Parents, especially mothers, wanted their girl child to be educated. (11) Most children were illiterate or had relapsed into illiteracy. But those few boys and girls who had completed secondary education had no work to do. (12) Most of these children belonged to Scheduled Tribe and other backward classes. (13) Majority of the parents were illiterate, daily wage earners having no idea about any form of schooling. (14) Most of these families were living in the city for the last three generations. (15) Many parents felt that education in school would not help their children to earn livelihood. On the contrary, they would start disliking the present jobs if educated in schools. (16) Parents wanted the educational expenses to be borne by the government. (17) Most sampled children worked in tea stalls, hotels or garages. (18) Employers wanted educational activities to take place before or after work. (19) The employers were of the view that there was no immediate use of their education but felt that it would be

of great help when they grew. Education would develop confidence in them to start independent work. (20) The teachers of neighbouring schools blamed the children and their parents for the neglect of education. [0581]

THAKRE, PRABHAKAR GHULARAMJI. 1993. **A study of the adult education programme launched by Nagpur University and its impact on the target group.** Ph.D., Edu. Nagpur Univ. Guide: Dr. K.L. Pandit.

Problem: This study assesses the impact of the adult education programme on the achievement of illiterates who participated in it.

Objectives: (i) To study the development of adult education programme of Nagpur University since 1979 with reference to (a) number of colleges that participated in the programme, (b) number of students which were involved in adult education programme as instructors, supervisors, etc., (c) number of principals and programme officers who participated that were and (d) number of adult education centres, established, (ii) to assess the impact of adult education programme on the target group, i.e. illiterates who attended adult education centres in terms of objectives of adult education programme, and (iii) to identify the deficiencies in the implementation of adult education programme and to evolve a model for improvement of the adult education programme.

Methodology: The sample of the study comprised 3464 subjects, covering 29 principals, 29 programme officers, 30 supervisors, 300 instructors, 76 adults who did not participate in adult education programme and 3000 illiterate adults who participated in the adult education programme. They were selected randomly. The tools used were interview schedules, questionnaires, and questionnaire-cum-check-list. The collected data were treated with percentage.

Major Findings: (1) The difficulties faced by the supervisors and instructors and experienced by the principals were non-availability of room/place for running adult education centres, poor attendance of adult learners, lack of co-operation of local persons and adult learners who were senior to instructors. (2) 90 % of the

adult learners were able to read and write simple sentences, letters (post-card) and do simple calculations in daily life. (3) 70 % of adult learners became aware of elements of health and hygiene, rights and duties of citizenship and participation in general discussion. (4) 50 % of the adult learners started acting independently in taking decisions, in participating in general discussions, opening saving accounts, etc. (5) Interest of female learners was found more towards sewing, embroidery etc, rather than in literacy. (6) The percentage of attendance of female adult learners was more than that of male adult learners. (7) Most of the adult learners were interested in making query about economic activity. [0614]

EDUCATION OF THE SC, ST AND MINORITIES

SINUKLA, S.K. AND AGRAWAL, ARCHANA. 1997. **A study of socio-economic status, intelligence, occupational aspiration, self-concept and academic achievement of Scheduled Castes' and non-Scheduled Castes' students.** *Indian Journal of Educational Research*, Vol. 16(2), 15-19.

Problem: This study attempts to examine the socio-economic status, intelligence, occupational aspiration, self-concept and academic achievement of Scheduled Castes' and non-Scheduled Castes' students.

Objective: To find out the difference between SC and non SC students in their socio-economic status, level of intelligence, self-concept, occupational aspiration and academic achievement.

Methodology: The sample of the study comprised 225 Scheduled Castes' (150 boys and 75 girls) students of Class X from 14 aided secondary schools of Lucknow. The tools used to collect data were Socio-economic Status Scale by Kuppaswami, Raven's Progressive Matrices by J.C. Raven, Occupational Aspiration Scale by Grewal and *Swatva Bodh Parikshan* by Sherry, Verma and Goswami. Apart from these U.P. Board Examination results of Class X were also taken as academic achievement of students. The

collected data were treated with mean, SD and critical ratio.

Major Findings: (1) It was found that Scheduled Castes' (SC) students were low for socio-economic status as compared to non-Scheduled Castes' (non-SC) students. (2) No significant difference was found between SC and non-SC students in their level of intelligence. The same pattern was observed for SC and non-SC boys and girls. (3) The boys of both, SC and non-SC, had low level of self-concept as compared to their girl counterparts. SC boys were of low self-concept as compared to non-SC boys, though no significant difference was found in the level of self-concept of SC and non-SC girls. (4) The level of occupational aspiration of SC students was lower as compared to the non-SC students. The SC boys had low occupational aspiration in comparison to non-SC boys, though no significant difference in the occupational aspiration level of SC and non-SC girls was found. (5) The level of academic achievement of SC students was lower as compared to non-SC students. Boys, both SC and non-SC, had low level of academic achievement in comparison to their girl counterparts. [0681]

VERMA, B.P. AND NEGI, SITA. 1995. **Academic motivation among tribal and non-tribal adolescents: A cross-cultural study.** *Himshiksha: Journal of Education*, Vol. 25(4), 63-72.

Problem: This study attempts to ascertain the differences in academic motivation of tribal and non-tribal, tribal male and non-tribal male, tribal female and non-tribal female adolescent students.

Objectives: (i) To study the differences in academic motivation of tribal and non-tribal, tribal male and non-tribal male, tribal female and non-tribal female adolescent students, and (ii) to explore the sex difference in academic motivation of tribal adolescent students and non-tribal adolescent students.

Methodology: The sample of the study comprised 225 tribal adolescents (120 males and 105 females) drawn from six tribal secondary schools of district Udaipur (Rajasthan) and 230 non-tribal adolescent students (130 male and 100

female) studying in six government secondary schools of district Udaipur. The subjects were selected by using random cluster sampling technique. The Keele Academic Motivation Questionnaire by Hartley, Holt and Hogarth (Hindi version by Verma) was used as a tool to collect the data. The obtained data were analysed by 't' test.

Major Findings: (1) It was found that non-tribal adolescent students had significantly higher level of academic motivation as compared to tribal adolescent students. (2) In both sub-groups of male and female, male and female non-tribal adolescents superseded their tribal adolescent counterparts. (3) In tribal and non-tribal groups, sex difference did not come out to be a significant differentiating factor with reference to academic motivation. [0554]

EDUCATION OF THE GIRLS AND WOMEN .

SHUKLA, ARCHANA. 1995. **Attitudes towards the role and the status of women in India: Some demographic correlates.** *Journal of Community Guidance and Research*, Vol. 12(2), 107-124.

Problem: It attempts to explore the effect of four demographic variables of gender, religion, family type and age on people's attitude towards the role and status of women in India. Twin pilot studies comprise the present study.

Objectives: (i) To explore the sex role egalitarianism and the attitudes toward the issues relating to Indian women in the present society, and (ii) to reveal the dynamic processes, if any, of such attitudes by assessing the differences associated with the gender, age, religion and family type.

Methodology: The sample comprised 370 male and female respondents of three age groups— young respondents (18-25 years), middle age respondents (35-50 years) and old age respondents (60 years and above). Out of 370, 173 respondents participated in 1st study and 197 in the 2nd study. The tools used to collect data were Sex-role Egalitarianism Scale by Beera and others and Attitude Towards Women Scale

by the author. The collected data were treated with mean and ANOVA.

Major Findings: (1) A gender wise comparison of mean score indicated that except in the 60 years and above group, females scored more than males in all ten attitudinal areas. However, only with respect to the harassment of women and women's right to inheritance, was the main effect of gender significant. (2) Hindu respondents demonstrated greater sex role egalitarianism and were more supportive of women's issues than the Muslim respondents. (3) The effect of age was also found to be significant in all areas except the women's right to inheritance issues; the young and the old were equally conservative. (4) The young and middle aged women groups were more non-traditional than men, but in the case of old age group, men were more non-traditional than women. The interaction effects of religion and age and gender and religion were also significant in all the ten attitudinal areas. (5) The young Hindu respondents were the most egalitarian and liberals as compared to their counterparts. (6) The gender differences in the second study were found to be significant in two sex role areas, i.e. educational and social, and two of women's issues, i.e. dowry and women's right to inheritance. (7) Respondents from nuclear families exhibited greater egalitarianism regarding parental and educational roles, were more supportive of the inter-caste marriages and were more opposed to harassment of women than respondents from the joint families. (8) Younger age groups were found to have higher mean scores in all ten attitudinal areas, thus demonstrating non-traditionalism than those of the older age groups. (9) The two way interactional effects of gender and age were found to be significant in all the areas except one issue — 'women's right to inheritance'. (10) The age related mean differences were similar in nuclear and joint family types. (11) The mean differences between the female respondents belonging to the nuclear v/s joint families were greater than those between the male respondents from the two family types. (12) The young Hindu female respondents were found to be the most non-traditional among all the groups in the second study too. [0640]

DEMOGRAPHIC STUDIES IN EDUCATION AND POPULATION EDUCATION

CHANDRALEKA, R. 1997. **Effectiveness of intervention strategies in the learning of population education concepts by Standard IX.** Ph.D., Edu. Avinashilingam Institute for Home Science and Higher Education for Women. Guide: Dr. G. Thilakam.

Problem: The present study attempts to assess the effectiveness of intervention strategies in the learning of population education concepts by Standard IX pupils in Coimbatore.

Objectives: (i) To study the effectiveness of video and tape-slide strategies in learning population education concepts by the pupils of Standard IX, (ii) to compare the effectiveness of teaching devices — pupil discussion, interactive instructions and assignment — incorporated into the intervention strategies, (iii) to develop achievement tests and an attitude test that enable to assess the effectiveness of the strategies and the devices, (iv) to assess the influences of socio-economic status on the knowledge and attitude of the pupils, as seen from the test scores in achievement and attitude scale, before exposing them to the experimental programme, (v) to compare the relative effectiveness of the intervention strategies and devices in terms of locality, gender and their interactions, and (vi) to find out the correlation between pre- and post-achievement scores and pre- and post-attitude scores in various strategy devices and with socio-economic status.

Methodology: The sample of the study comprised 400 pupils of Standard IX from four schools of Coimbatore, belonging to both urban and rural localities. The schools were selected through random sampling technique. A video lesson, tape-slide lesson, achievement test and attitude scale developed by the investigator were used as tools to collect the data. The collected data were treated with 't' test, analysis of variance, analysis of co-variance, Scheffe's test and correlation coefficient.

Major Findings: (1) Both video and tape-slide strategies were effective in the training of population education concepts compared to the traditional method of teaching for Standard IX pupils and the difference was significant. (2) The two strategies, namely video and tape-slide, were also effective in developing favourable attitude towards checking population growth and the difference in gain scores was significant between the control and experimental groups. (3) The effect of video strategy was the same between boys and girls, between gender and locality and between gender and devices, which was at equal level of understanding. (4) In all the three devices – interactive video, pupil discussion and assignment – experimental groups performed better than control groups. (5) The co-variables, SES and pre-test achievement scores, in tape-slide strategy were significant. Girls performed better than boys and rural pupils performed better than their counterparts in urban areas. In all the cases of interactions of gender, locality and devices, the experimental groups performed better than their counterparts in the control groups. (6) The order of effectiveness of the devices in learning population education concepts using tape-slide strategy was interactive, tape-slide and pupil discussion and assignment. (7) The covariates, SES and pre-test attitude scores, were significant. In all the three experimental devices and the cases of interactions of gender, locality and devices, the pupils of experimental group developed a more favourable attitude towards checking population growth than control group. (8) There was no significant correlation between the gain scores of video, tape-slide and attitude when they were compared with each other. (9) There was no significant correlation between the socio-economic status and the gain scores of achievement in video, tape-slide and attitude scores, except in rural girls in tape-slide. [0563]

JAPE, D.K. 1995. **A critical study of the population education programme implemented by State Institute of Education/State Council of Educational Research and Training, Maharashtra, with effect from July 1981 to December 1990.** Ph.D., Edu. Univ. of Pune. Guide: Dr. P.R. Naladkar.

Problem: The present study is designed to critically examine the impact of population education programme launched by the State Institute of Education/State Council of Educational Research and Training, Maharashtra from July 1981 to December 1990, on headmasters, school teachers and pupils at the primary and secondary levels in Maharashtra.

Objectives: (i) To find out the extent to which teachers and headmasters followed the concept and methodology of population education, (ii) to find out the extent of awareness that could be developed among the pupils of primary as well as secondary schools, and (iii) to find out the overall position of the institutionalization of population education in primary and secondary schools.

Methodology: The sample of the study comprised 19,322 primary and 3,508 secondary headmasters, 48,439 primary and 3,816 secondary teachers, 17,738 primary and 7,468 secondary pupils, and 198 BEOs. The tools used to collect data included Awareness Tests for Standards I to VIII students, an interview schedule and an observation schedule. The collected data were treated with mean, SD and percentages.

Major Findings: (1) It was found that most of the teachers already knew the contents of population education. (2) The study showed that the orientation programmes did benefit some teachers because the minimum score rose by three and a half times. (3) The orientation programmes succeeded in developing the desired awareness among pupils. (4) The group interviews with teachers revealed that population education was not taken seriously enough by the teachers. (5) The population education programme could satisfactorily develop the desired awareness among the students. However, possible effect of mass media in the development of awareness among students could not be ruled out. [0618]

KAUR, GURINDERJIT. 1996. **A study of population awareness among rural adults of advanced and backward villages in relation to their age, sex, educational status and family related**

variables. Ph.D., Edu. *Punjabi Univ.* Guide: Dr. Piarey Lal Gupta.

Problem: It aims at finding out the population awareness among the rural adults of advanced and backward villages in relation to their age, sex, educational level, family size, family structure, caste, income and occupation.

Objectives: (i) To compare the population awareness of rural adults of advanced villages with rural adults of backward villages, (ii) to study population awareness of rural adults in relation to their age, educational status, family size, family structure, caste, income and occupation, (iii) to compare the population awareness of rural adults belonging to different age groups, educational status, family size, family structure, caste, income and occupation, and (iv) to compare the population awareness of young, middle aged and old aged rural adults.

Methodology: The sample of the study comprised 598 rural adults. Out of them, 401 adults (200 males and 201 females) were from advanced villages and 197 adults (105 males and 92 females) were from backward villages of Ropar district. The tools used to collect data were bio-data forms and Population Awareness Test. The collected data were treated with mean, SD and 't' test.

Major Findings: (1) It was found that rural adults, males as well as females, of advanced villages were higher in population awareness than the rural adults of backward villages. (2) In relation to their age, family size, caste and business, rural adults of advanced villages were more aware of population problems than their counterparts from backward villages. But there existed no difference in the population awareness of rural adults of advanced and backward villages in relation to their gender. (3) As regards educational status, there existed no difference in the population awareness of illiterate rural adults, but moderately qualified and high qualified rural adults were more aware of population explosion than the rural adults of backward villages. (4) In relation to family structure, rural adults of advanced villages belonging to joint families were more aware of population dynamics than rural adults of backward villages, but in the case of nuclear

families there existed no difference. (5) It was found that rural adults of low and average income groups were more aware of rapid growth of population than their counterparts from backward villages, but as regards high income group, there existed no difference in the population awareness of rural adults of both categories of villages. (6) In relation to age, young, middle-aged as well as old-aged rural adults of advanced villages were more aware of population problem than the rural adults of the respective age group belonging to backward villages. [0678]

COMPARATIVE EDUCATION

RANA, G. 1997. **A comparative study of the growth of education in India, United Kingdom, Malaysia and Kenya in value perspective during 20th century A.D.** Ph.D., Edu. *Maharshi Dayanand Univ.* Guide: Dr. B.S. Dagaur.

Problem: This study addresses the problem of deepening value crisis in the present day world situation at large and in the Indian context in particular.

Objectives: (i) To study various constituent factors of the educational systems of India, United Kingdom, Malaysia and Kenya, (ii) to study the historical growth of education in the four countries, (iii) to study the educational policies and development of educational systems of the countries under study during 20th century, (iv) to trace the various steps taken by the different governments from time to time during 20th century in handling/solving the problems of education, through educational surveys, reports of the committees and commissions on education, (v) to observe the value aspect in the educational systems of the countries under study, and (vi) to compare various levels and aspects of educational systems of the four countries to derive conclusion in value perspective, in reference to Indian system of education.

Methodology: The researcher has used historico-analytical method in the study. The study has been carried out based on library work.

Major Findings: (1) As hypothesized in the beginning, the cause of 'value crisis' or moral degeneration in India cannot be attributed to making education secular, devoiding it of religious or moral content. This has been substantiated by research studies which unequivocally show that people who are instructed in moral and religious education are found no better than those who are not so instructed. (2) The pattern of development of educational systems in the three countries viz., India, Malaysia and Kenya has been uniform to a large extent with respect to common motive of the colonies successfully creating the 'elite' group through various government policies and the 'public school' system of English education. (3) The beneficiaries of this education in the three erstwhile British colonies had responded differently to the introduction of this system, adopting it according to their social structure. (4) The main character of development of education in India after independence was marked by an haphazard expansion of education at all levels and in all fields without taking cognizance of its quality, excellence, or manpower needs resulting in colossal unemployment and brain-drain contributing to further 'value crisis' in India. [0616]

EDUCATIONAL ASSESSMENT AND EVALUATION

BANDH, B.H. 1995. A critical study of assessment system in colleges of education. Ph.D., Edu. *Amravati Univ.* Guide: Dr. W.G. Dahake.

Problem: It attempts to examine the effectiveness of the traditional system of examination and Cumulative Grade Point Average (C.G.P.A.) system of assessment with special reference to reliability and objectivity in assessment of pupils in education faculty.

Objectives: (i) To present a clear picture of assessment done traditionally and following C.G.P.A. system in the faculty of education, (ii) to measure the internal consistency in the marks given to the sessional work by the teachers following the traditional as well as C.G.P.A. system, (iii) to search for the extent of reliability in the assessment done in practical

examinations and in theory papers, (iv) to examine the work ability of traditional as well as C.G.P.A. system with special reference to objectivity and reliability in the assessment, and (v) to search for the effectiveness of assessment system in practice and to examine the possibility of suggesting a more effective system.

Methodology: Marks obtained by the students during 1985 to 1990 in B.Ed. examinations were collected from two university records, namely Nagpur University and Amravati University. The total number of students whose marks were collected was nearly six thousand. Records of B.Ed. examinations conducted during 1985-90 and an interview schedule were used to collect relevant data. Mean, SD, chi-square, correlation coefficient and regression analysis were used to treat the data.

Major Findings: (1) Internal consistency was relatively more in the evaluation of written examination than in the practical examination. (2) Correlation coefficient between marks obtained in theory examination and in practical examination was found very poor. (3) Because the teachers were conditioned to traditional assessment system, a significantly large number of them had not even taken pains in understanding C.G.P.A. scheme. (4) C.G.P.A. gave importance to consistency as a result of which even if a student gets more marks but lacks in consistency, he gets lower grade than the one having less marks but more consistency. (5) Dislike towards C.G.P.A. scheme of assessment was observed as a result of its complexity. [0565]

DESAI, JYOTI K. 1998. Construction and standardization of a group test of intelligence in Gujarati for the pupils of Standards V, VI and VII in the age group of 9 to 13. Ph.D., Edu. *Gujarat Univ.* Guide: Dr. L.K. Patel.

Problem: It attempts to study the steps taken in constructing and standardizing a group test of intelligence in Gujarati for the pupils of Standards V, VI and VII.

Objectives: (i) To construct an intelligence test in Gujarati for the pupils of Standards V, VI and

VII, (ii) to prepare instructions to conduct the test, (iii) to standardize the test on a representative sample of pupils, (iv) to set different types of norms for the test, age norms for age 9 to 13, grade norms for Standards V, VI and VII, area wise and zone wise averages, (v) to see if there is any significant difference among the average scores of boys and girls and different areas and zones, (vi) to plot a graph of mean scores of ages against ages, and to draw a curve of mental growth, (vii) to determine the reliability and validity of the test, and (viii) to prepare a manual for the test comprising of a ready-reckoner of IQs from scores.

Methodology: The sample used in the study covered 2,583 pupils (1,300 boys and 1,283 girls) drawn from five zones of Gujarat, who were studying in Classes V, VI and VII. Their age ranged from 9 to 13 years. They were selected through stratified random cluster sampling method. After studying various tests prepared in America and India, suitable items to be included in the test were coined for the following sub-tests. Verbal: odd-man-out, following directions, analogies, and Non Verbal: mirror images, sequence of pictures, progressive matrices. These items were then subjected to item — analysis procedures to determine item-validity and item-facility values, based on a sample of 370 pupils, and were then rearranged in spiral omnibus pattern. Thus the final version of the test comprised of 78 items to be attempted in 35 minutes. A practice test of 12 items to represent the six sub-tests preceded the actual test. Age norms, grade norms, area wise norms and zone wise norms were developed. Then the averages were plotted on a graph paper and were smoothed to show the curve of mental growth. From this curve, norms for different ages were determined. A ready-reckoner of IQs and PRs was prepared for each possible score and the IQs were classified for the understanding of the user.

Major Findings: (1) Rural schools were found very backward and semi-urban schools were found backward than the urban schools. In rural schools, some pupils could not read or write even their names, and could not understand the method of the sub-tests. So about 150 booklets of such pupils had to be rejected. (2) Rural and semi-rural pupils were not conscious of the speed

of time. Liberal time was allowed for taking the test, so that even slow readers could answer the test within the time limit of 35 minutes. (3) All sub-tests were not found equally easy or difficult. The picture sequence and progressive matrices were found easier than the other types. [0612]

JOSHI, BHARAT. 1997. Validation of the index of metacognitive reading awareness using the Rasch Model of item response theory. The Progress of Education, Vol. 71(6), 122-126 and 144.

Problem: It is an attempt to study validation of the index of metacognitive reading awareness using the Rasch Model of item response theory.

Objectives: (i) To apply item response theory (IRT) to the partial credit scoring of the metacognitive reading awareness of secondary school students, and (ii) to validate the Index of Reading Awareness (IRA) in the framework of item response theory (IRT).

Methodology: The sample of the study comprised 289 boys and girls studying in Standard VIII in six different secondary schools in Bhavnagar city. They were selected through random technique. The tool used to collect data was Index of Reading Awareness by Paris and Jacobs. The collected data were treated with mean, SD and 't' test.

Major Findings: (1) The Rasch Partial Credit Model (RPCM) of Item Response Theory was applicable to the partial credit scoring of the metacognitive reading awareness of secondary school students. (2) As a result of this study, a reliable and valid metacognitive reading awareness test was obtained in Gujarati language using the RPCM in the framework of IRT. (3) The item of the Index of Reading Awareness (IRA) were reasonably successful in defining the variable of metacognitive reading awareness. They were unidimensional and locally independent for measuring the variable. On the whole, the data were satisfactorily fit to the RPCM. (4) Although the person parameter estimates were not item free, the item parameter estimates were person free, as they were invariant. [0684]

MEERA, S. 1996. An evaluation of the total internal assessment system in the Avinashilingam Deemed University. Ph.D., Edu. Avinashilingam Institute for Home Science and Higher Education for Women. Guide: Dr. M. Chandramani.

Problem: This study attempts to examine critically and evaluate the total internal assessment system in the Avinashilingam Deemed University.

Objectives: (i) To examine the system of total internal assessment as followed in the Avinashilingam Deemed University, (ii) to study the opinions of the students and teachers on various aspects of the system, (iii) to identify the problems faced by students and teachers, (iv) to identify the shortcomings in the implementation of the programme, if any, (v) to suggest measures to improve the system, and (vi) to assess the effectiveness of the total internal assessment system.

Methodology: The sample of the study comprised 920 students of II and III years which included undergraduates, post-graduates and graduates, apart from 179 teachers. Tools and techniques used to collect the data were participant observation, documents and opinionnaires. The collected data were treated with differential and qualitative analysis.

Major Findings: (1) The student population had expressed favourable views on three of the four aspects, namely benefits to the students, measures adopted and faith in teachers. Only in self-assertion and morale, the score was below the neutral level. (2) The qualitative analysis also confirmed the finding that the students, on the whole, favoured the total internal assessment system and acknowledged the benefits offered. (3) The views, as expressed by the teaching faculty, revealed a positive attitude of the teachers towards the total internal assessment system. (4) The teachers expressed favourable views in all the five aspects. (5) The differential analysis showed that the students at the post-graduate level had a less favourable attitude towards the system than at all the other levels and faculty-wise analysis showed less favourable attitude on the part of the science faculty, compared to other faculties, namely, home-science, humanities and education. [0552]

PATRICK, FRANCINA C.J. 1995. Effectiveness of two feedback corrective procedures used in mastery learning strategy in terms of students' achievement and retention in chemistry. Ph.D., Edu. Karnatak Univ. Guide: Prof. Shashikala Deshpande.

Problem: This study examines the impact of two feedback correctives used in mastery learning strategy on students' achievement and retention.

Objectives: (i) To compare chemistry achievement and retention scores of students taught through mastery learning strategy and those taught through conventional method of teaching, (ii) to compare achievement and retention scores of boys and girls in mastery learning group and those in conventionally taught group, (iii) to compare chemistry achievement and retention scores of students in teacher feedback and peer feedback corrective conditions, (iv) to compare achievement as well as retention scores of boys and girls subjected to two feedback corrective — teacher and peer, (v) to compare attitude towards science of students subjected to teacher and peer feedback correctives, (vi) to compare attitude towards mastery learning of students subjected to teacher and peer feedback corrective conditions, and (vii) to compare attitude towards mastery learning strategy of boys and girls subjected to two feedback corrective conditions — teacher and peer.

Methodology: The sample of the study comprised 115 students of Grade IX from two private high schools. They were selected through purposive sampling technique. The tools used to collect data were achievement test, Raven's Standard Progressive Matrices, Socio-economic Status Scale by Kuppaswamy, Scientific Attitude Scale by Avinash Grewal and Mastery Learning Strategy Attitude Scale by the investigator. The collected data were treated with mean, SD, t-test, F-test and analysis of co-variance.

Major Findings: (1) The students taught through mastery learning strategy achieved and retained significantly higher than the students taught through conventional method of teaching. (2) The students subjected to teacher feedback corrective and peer feedback corrective did not differ in their achievement and retention, respectively. (3) Boys taught through mastery

learning strategy achieved significantly better than girls but they did not differ on the retention scores. (4) There was no significant difference in the students' attitude towards science before and after being taught through mastery learning strategy and conventional method of teaching strategy. (5) Students subjected to MLS and CMT did not differ significantly in their attitude towards science. (6) Students subjected to teacher feedback corrective and peer feedback corrective conditions did not differ significantly in their attitude towards science. (7) Boys and girls subjected to teacher feedback corrective and also peer feedback corrective did not differ significantly in their attitude towards science. (8) The students taught through mastery learning strategy showed highly positive attitude towards mastery learning strategy. (9) After being subjected to MLS girls showed significantly more positive attitude than boys towards MLS. (10) Students subjected to teacher feedback corrective and peer feedback corrective did not differ significantly in their attitude towards mastery learning strategy. (11) Boys and girls subjected to teacher feedback corrective and also peer feedback corrective did not differ significantly in their attitude towards mastery learning strategy. [0630]

ORGANIZATION, ADMINISTRATION AND MANAGEMENT OF EDUCATION

CHAKRAVARTI, K.K.; PANDA, B.N.; TRIPATHY, P.S. AND MISHRA, K.N. 1996. **Identification of minimum support facilities required for effective implementation of competency-based MLL approach to teaching-learning at the primary stage in the DPEP district Dhenkanal of Orissa.** Independent study. Bhubaneswar: Regional Institute of Education. (DPEP study).

Problem: This study is designed to identify the essential inputs which can support desired competency-based teaching-learning in primary classrooms and facilitate the expected MLL achievement by each child.

Objectives: (i) To assess the existing facilities available with the schools in the areas of academic, institution and infrastructure, (ii) to assess the achievement of the prescribed MLL competencies by the pupils, (iii) to identify the

facilities (keeping them to the minimum) needed by the schools in the academic area for improvement of competency-based teaching-learning and institutional area to develop intervention strategies for providing identified minimum support facilities to the primary schools.

Methodology: The sample of the study consisted of 267 students, 133 students of Class II and 134 students of Class III, and their teachers, selected randomly from all the DPEP project schools of Dhenkanal district of Orissa. The data were collected using general information schedule, diagnostic tools for teachers, interview schedule and competency-based achievement tests for students.

Major Findings: (1) Class I and Class II should each be made a single teacher class. Two qualified and motivated teachers should be exclusively provided for Classes I and II so that they can give undivided attention to the learning of children, who have just joined the school, for initiation into learning. This is significant in view of the fact that most of the schools were multi-grade and had multi-grade set-up for Classes I and II. (2) Training may be given to the teachers to make them high motivated professionals who can instill the acquisition of skill processes to child learners on desired competencies, to prepare activities or demonstrations on lessons and make them proficient in the use of science, mathematics and tool kit appropriate to lessons, and to handle multi-grade situations. (3) The schools may be provided with enough of teaching aids, books, registers, papers, pencils, colour brushes and good physical facilities which can sustain the required educational activities of young children and their teachers for a better part of the day. [0589]

CHAUDHARI, C.L. 1997. **Gandhi Vidyapith, Vedchhi: Ek Vivechnatamak Abhyas.** Ph.D., Edu. South Gujarat Univ. Guide: Dr. Ummed Singh.

Problem: This study attempts to examine critically the historical background activities and problems of the Gandhi Vidyapith, Vedchhi.

Objectives: (1) To know the historical background of Gandhi Vidyapith, Vedchhi, (ii) to obtain detailed information of the

institution from the year 1967 to 1994, (iii) to study the present structure and its activity in the light of its object, (iv) to get the knowledge of human relation in the institution, and (v) to study the important problems of the institution.

Methodology: Opinions were collected from 96 students. 34 professors and 10 management members. Opinion poll was organized, apart from interviews and documents which served as sources of data collection. The collected data were treated using percentages.

Major Findings: (1) It was observed that importance was given to self-dependent education, basic policy adopted was to train students to become financially, socially and mentally self-dependent. (2) It was found that students trained in Gandhi Vidyapith, Vedschi were living a life purely based on simple living and restraint as per Gandhian *Nat Talim* thinking. (3) Three education faculties were in existence in the institution. (4) Professors, students and principals were united. All programmes of the college were carried out smoothly. (5) It was suggested that the location of three faculties of Gandhi Vidyapith should be separated and made independent. Faculty officers, administration, financial subjects, hostels, educational activities, daily activities and prayer gathering for the three faculties should be separate. Conflicts with each other would be avoided by that and each division would think of its own through that arrangement. (6) It was suggested that a director should be appointed to govern the whole premises of the university and he should reside in the university premises in order to solve small and big problems of the institution on the spot. [0607]

DAS, R. 1995. **A study of principals' instructional management behaviour, students' performance and organizational climate in secondary schools.** Ph.D., Edu. Kurukshetra Univ. Guide: Dr. Sheela Mangla.

Problem: It attempts to study the impact of instructional management behaviour of the principals and organizational climate of the schools on students' performance.

Objectives: (i) To study the main and

interactional effects of age, sex, experience, type of schools, instructional management behaviour of the principals and organizational climate of the schools on students' performance, (ii) to determine the inter correlation between the dimensions of organizational climate of the schools and instructional management behaviour of the principals, (iii) to establish multiple regression equations for instructional management behaviour of the principals with twelve dimensions of organizational climate of the schools, and (iv) to establish multiple regression equations for organizational climate of the schools with ten dimensions of the instructional management behaviour of the principals.

Methodology: The sample of the study comprised 48 principals, 352 teachers and 960 students selected from 48 secondary and senior secondary schools of 5 districts of Haryana. The schools were selected through the method of random sampling and principals and teachers were selected through the method of purposive sampling. The tools used to collect the data were Principal Instructional Management Rating Scale of Hallinger and Murphy, Organizational Climate Description Questionnaire of Sharma and Bhatnagar, Principal Demographic Information Blank by the investigator. The collected data were treated with analysis of variance, multiple correlation and multiple regression equations.

Major Findings: (1) There was no significant difference in students' performance irrespective of the age of the principal. (2) There existed a significant difference between effective and less effective instructional management behaviour of the principals on students' performance. (3) There was no significant difference in students' performance between the effective and less effective organizational climate of schools. (4) There existed two factor interactional effect of age and instructional management behaviour of the principals on students' performance. (5) There existed two factor interactional effects of age of the principal and organizational climate of the school on students' performance. (6) There existed two factor interactional effects of instructional management behaviour of the principals and organizational climate of the schools on students' performance. (7) There

existed three factor interactional effects of age, instructional management behaviour of the principals and organizational climate of the school on students' performance. (8) There was no significant difference in student's performance whether it was male or female principal. (9) There was no two factor interactional effects of sex and instructional management behaviour of the principal on students' performance. (10) There was no two factor interactional effects of sex of the principals and organizational climate of the school on students' performance. (11) There existed three factor interactional effects of sex, instructional management behaviour of the principal and organizational climate of the school on students' performance. (12) There was no significant difference in students' performance whether the principal had more or less experience. (13) There existed two factor interactional effects of experience and instructional management behaviour of principals on students' performance. (14) There existed two factor interactional effects of experience of the principals and organizational climate of the school on students' performance. (15) There existed three factor interactional effects of instructional management behaviour of the principal and organizational climate of the schools on students' performance. (16) There existed a significant difference between government and private schools on students' performance. Private school showed better students performance than government schools. (17) There existed two factor interactional effects of type of school and instructional management behaviour of the principals on students' performance. (18) There was no two factor interactional effects type of school and organizational climate of the schools on students' performance. (19) There was no significant interactional effects of type of school, instructional management behaviour of the principals and organizational climate of schools on students' performance. (20) There existed positive relationship between instructional management behaviour of the principals and organizational climate of the school. (21) Principals instructional management behaviour increased by harmony, inspiration, thrust, academic emphasis, discipline and control, provision of facilities, commitment,

affiliation and esprit, and decreased by democracy and freedom, intimacy and production emphasis. (22) Organizational climate of the schools increased by framing school goals, supervising and evaluating instruction, coordinating the curriculum, monitoring student performance, protecting instructional time, developing academic standards and providing incentives for learning, but it decreased by maintaining administration visibility. [0567]

DAS, R. 1997. Management of learning situation by utilizing peers and seniors in one/two teacher primary schools. Independent study. *Bhubaneswar: Regional Institute of Education.* (DPEP study).

Problem: This study deals with the problems of multi-grade schools, particularly problems relating to management of learning situation in these schools due to paucity of teachers.

Objectives: (i) To assess the learning situation in one/two teacher primary schools, (ii) to identify strategies adopted by teachers to manage the learning situation, (iii) to find out the effectiveness of these strategies through students' achievement, (iv) to identify peer and senior tutors who can help in managing the learning situation, (v) to evolve the strategy for peer and senior tutoring for management of the learning situation, and (vi) to find out the effectiveness of this strategy in different school subjects.

Methodology: The sample of the study comprised 300 students of Classes III, IV and V from 10 schools located both in the rural and urban areas of Orissa. They were selected through random selection method. The tools used to collect data were classroom observation schedule, teachers' interview schedule, students' interview schedule, pre-intervention subject knowledge test and post-intervention subject knowledge test, intelligence test and leadership ability test.

Major Findings: (1) Pre-intervention and post-intervention achievement tests showed that peer tutoring and senior tutoring could be effectively practised in multi-grade schools. (2) Results of the achievement test showed that peer and

senior tutoring could be practised effectively in schools where large-class situation existed along with multi-grade situation, by engaging peer and senior tutors. This could be done by division of grade into two sections and engaging peer/senior tutors for teaching one section or group of students in separate rooms/places. This is possible where number of rooms (or free place) available is more than the teachers available in the school. (3) Results showed that improvement in achievement level of students was more in case of schools where students' socio-economic level was low and they did not get parental guidance or support in comparison to schools where students' socio-economic level was high/and or parental guidance or support was available. This showed that peer and senior tutoring was more effective in schools of the former category. (4) Peer tutoring not only improved the achievement of the learners, it also improved the achievement level of peer tutors in respective subject areas. (5) Peer tutoring and senior tutoring not only helped in improving the achievement level of students in various grades, it also helped in creating a joyful learning atmosphere in the school. (6) Peer tutoring was preferable and could be practised more conveniently because of the following reasons: (a) senior tutors could not always give time to their juniors, and (b) peer tutors found tutoring more comfortable and enjoyable than senior tutors. [0577]

KERAWALLA, GULISTAN J. 1995. **Students' attitude towards the school in relation to their classroom climate and school type.** *The Progress of Education*, Vol. 69(6), 102-104.

Problem: It attempts to study students' attitude towards the school in relation to their classroom climate and school type.

Objective: To study the climate of the classroom and the type of management of the school which determine the policies and practices of the school.

Methodology: The sample of the study comprised 405 boys and 305 girls of Standard IX from 11 secondary schools (3 aided, 3 unaided, 3 Central and 2 Municipal Schools) of Greater Bombay with English as the medium of instruction. The schools were selected using stratified random

sampling technique. The tools used were Classroom Climate Scale and Scale of Attitude to School. The collected data were treated with correlation.

Major Findings: (1) It was found that the relationship of the students' attitude towards school score (ASS) with their scores on perceived classroom climate (CCS) and type of management of the school (TMS) was not significant. (2) It was found that students' attitude towards the school was influenced by their perceptions of the classroom climate, including their relationship with peers and teachers, the nature of rules and control and the nature of opportunities provided for personal growth. However, the influence of the type of management of the school in which the student was studying was negligible. [0687]

KRISHNAN, S. SANTIANA AND STEPHEN, M. 1997. **Organizational climate of school: A study.** *The Progress of Education*, Vol. LXXI(6), 131-133.

Problem: It attempts to study the organizational climate of schools.

Objective: To study the organizational climate of the high and higher secondary schools of Tuticorin.

Methodology: The sample of the study comprised 345 teachers of 24 higher secondary and high schools, which included boys, girls, as well as, co-educational schools of Tuticorin. The tools used to collect the data were School Organizational Climate Description Questionnaire (SOCDO) by Sharma. The collected data were treated with mean, SD, chi-square, critical ratio and analysis of variance.

Major Findings: (1) Teachers working in schools with different qualifications significantly differed in the organizational climate. (2) Teachers working in higher controlled climate school affected the organizational climate more than those who were working in the lower controlled climate. (3) Teachers working in different categories (boys, girls and co-education) of the schools also significantly differed in the organizational climate score. [0685]

NONGBRI, CREAMLIMON, 1997. **A critical study of**

the role played by SCERT towards qualitative improvement of school education in Meghalaya. Ph.D., Edu. North-Eastern Hill Univ. Guide: Prof. P.P. Gukolanathan.

Problem: This study addresses the role and contribution of the SCERT towards qualitative improvement of school education in Meghalaya.

Objectives: (i) To trace the origin and development of SCERT in the state, (ii) to survey various action research activities in the state and their contributions to the education system, (iii) to assess the effect of the SCERT work in the area of curriculum development and production of learning materials, (iv) to study various training programmes organized by the SCERT and to assess their effect on the education system in the state, and (v) to find out the problems faced by the SCERT in the implementation of the programmes in the state.

Methodology: The sample of the study comprised 429 subjects (383 teachers, 10 inspectors, 6 principals and 30 academic officers) from different districts of Meghalaya covering both rural and urban areas. They were selected using random sampling technique. The tools used to collect data included questionnaires and interview schedules. The collected data were treated with percentages.

Major Findings: (1) The SCERT was set up on 4th October 1976 and now has 30 academic staff and 43 administrative staff. (2) During the period 1978-95, SCERT had conducted 37 seminars and held conferences and 14 research studies which contributed towards improving the quality of school education. (3) Development of curriculum at the primary level was done under UNICEF-assisted Project - 2 (PECR). (4) Development of teacher education curriculum for two years normal training course and one year course for basic training centres was done at the elementary stage. (5) Revision of secondary school curriculum was done by the SCERT based on the national curriculum framework. (6) At the primary stage, instructional materials were developed and implemented in the schools. At the secondary level, no instructional materials were developed by the Council. (7) In-service training courses were conducted intensively in the state in

different subject areas and also in the method of teaching for improvement of classroom teaching-learning in schools. (8) No instructional material was developed for teacher training institutes based on the curriculum. [0560]

SINGH, D.P. 1996. **Voluntary organizations in Rajasthan and the impact of their educational programmes.** Ph.D., Edu. Mohanlal Sukhadia Univ. Guide: Dr. A.P. Sharma.

Problem: The study is based on the effect of educational programmes and their administrative structure and suggestions to solve the problems faced by voluntary organizations in Southern Rajasthan.

Objectives: (i) To find out the impact of educational programmes implemented in rural areas by voluntary organizations in bringing educational awareness, social awareness, cultural awareness, physical awareness and health awareness, (ii) to find out the position of voluntary organizations in the administrative set-up, educational efforts, efforts towards economic development and supply of physical resources, (iii) to find out the hardships encountered implementing the programme in the field (areas) of education by voluntary organizations, (iv) to give suggestions to remove the difficulties in the implementation of programmes in the area of education by voluntary organizations, and (v) to find out the probabilities of further researches.

Methodology: The sample of the study comprised 511 subjects covering 440 beneficiaries, 11 organizers, 20 supervisors and 40 field workers. The tools used to collect the data were Educational Programme Assessment Scale, Work-condition Assessment Questionnaire, Programme Assessment Questionnaire an interview schedule and field observation schedule. The collected data were treated with percentiles and coefficient of correlation.

Major Findings: (1) The status of awareness towards social and health area was highest. (2) The status of awareness towards social and education was very good. (3) The status of physical awareness was below normal. (4) The

positive correlation of each area of awareness with other areas was of high standard. (5) The position of payment of salary to workers was very bad. (6) Poor attendance of beneficiaries due to dislike, lack of stay arrangement and transportation facilities, was the main problem in implementing the programme. (7) Programmes based on public participation were implemented effectively by voluntary organizations. (8) Highly placed officers of the organization were cooperating with the workers. (9) Voluntary organizations experienced difficulties in economic management of formalities. (10) Mostly voluntary organizations prepared the programme on the demand of the area. (11) These organizations fulfilled their economic necessities by grant, donation, charity shows and public cooperation. (12) There was scarcity of trained workers. [0548]

CORRELATION OF TWO INDEPENDENT

✓ KHARE, SUNITI AND GREWAL, AVINASH. 1997. **Relationship among speed of information processing ability, creativity and academic achievement.** *Psycho-Lingua*, Vol. 27(1), 53-56.

Problem: The present study tries to investigate relationship among speed of information processing ability, creativity and academic achievement.

Objective: To study the extent of expanding relationship among speed of information processing ability, creativity and academic achievement of Class V students.

Methodology: The sample consisted of 595 students (335 urban and 260 rural) from 19 primary schools of Bhopal division studying in Class V. The tools used to collect the data were Speed of Information Processing Ability Scale, Torrance Test of Creative Thinking (TTCT), Figural Form and Academic Achievement Test (AAT) by the researcher. The collected data were treated with product-moment correlations.

Major Findings: (1) There was negative but significant correlation between SIPA and CR of boys studying in urban primary schools. Further, significant correlation was also found

between SIPA and CR of boys studying in rural primary schools. (2) There was no significant relationship between SIPA and AA of the different sub-samples students studying in rural and urban primary schools except in case of total urban sample. However, coefficients of correlation for the rural primary students had been found to be significant. (3) The coefficients of correlation between CR and AA of students studying in urban and rural primary schools were significant. Further, coefficients of correlations for urban girls were also found significant. [0600]

MAKHURI, R. AND PANDE, SHASHI KIRAN. 1997. **Self-concept of adolescents in relation to their academic achievement.** *Psycho-Lingua*, Vol. 27(2), 121-124. ✓

Problem: It attempts to study the self-concept of adolescents in relation to their academic achievement.

Objective: To investigate the self-concept of adolescents in relation to their academic achievement.

Methodology: The sample of the study comprised 200 students (100 boys and 100 girls) studying in the Intermediate College of Kotdwara city, who were selected through random selection method. Their age ranged between 16 to 18 years. The tool used to collect the data included Self-concept Inventory by Deo Pratibha. The collected data were treated with mean, SD and 't' test.

Major Findings: (1) Academic achievement and self-concept were not significantly related. (2) Significant relationship was observed with academic achievement of adolescents having high and low self-concept. (3) No significant difference was found between academic achievement of adolescents belonging to high and low self-concept. [0627]

MINNALKODI, B. 1997. **A study of higher secondary school students' achievement in zoology in relation to anxiety, achievement-motivation and self-concept.** Ph.D., Edu. Annamalai Univ. Guide: Dr. (Ms.) S.S. Williams.

Problem: It attempts to study the higher secondary school students' achievement in

zoology in relation to anxiety, achievement-motivation and self-concept.

Objectives: (i) To find out the level of achievement in zoology in relation to anxiety, achievement-motivation and self-concept, among the whole sample, different sex, different locality, different types of schools, occupations, SES of the students, (ii) to find out whether there is a significant difference in the achievement scores, anxiety scores, achievement-motivation scores and self-concept scores of different sex, locality, types of schools, different occupations and different SES, (iii) to find out whether there is a significant relationship between anxiety scores and achievement scores of zoology as well as with different sub samples, (iv) to find out whether there is a significant relationship between achievement-motivation scores and achievement scores of zoology as well as with different sub samples, (v) to find out whether there is a significant relationship between self-concept scores and achievement scores in zoology as well as with other sub samples, (vi) to find out whether there is a significant relationship between anxiety scores and achievement scores, (vii) to find out whether there is a significant relationship between anxiety scores and self-concept scores, (viii) to find out whether there is a significant relationship between achievement-motivation scores and self-concept scores, and (ix) to find out whether there is a significant relationship between independent variables, namely anxiety, achievement-motivation and self-concept on the one hand and independent variable, namely achievement in zoology on the other.

Methodology: The sample of the study comprised 900 students, who had opted zoology as elective in Standard XI in Cuddalore Educational district. They were selected through random sampling method. The tools used to collect data were achievement test by the investigator, Anxiety Scale by Sinha, achievement-motivation test by Rao and Self-Concept Scale by Saraswat. The collected data were treated with product moment correlation, partial correlation, multiple correlation and path analysis.

Major Findings: (1) There was a significant difference between boys and girls on achievement scores, achievement-motivation,

but not on anxiety or self-concept. (2) The rural and urban students did not differ on their achievement, but on anxiety, achievement-motivation and self-concept; they differed significantly. (3) The government and private school students differed significantly on their achievement, anxiety, while they did not differ on achievement-motivation and self-concept scores. (4) As regards the educational levels of parents, children who belonged to differing educational levels differed significantly on their achievement, but not on anxiety, achievement-motivation and self-concept. (5) Differing occupational status did not affect the achievement, anxiety, achievement-motivation and self-concept of students. (6) Differing income levels of parents did affect the achievement levels of students, and anxiety, but not achievement-motivation and self-concept. (7) There was a significant positive relationship among achievement scores, achievement-motivation and self-concept of students. [0547]

PAHUJA, PREM LATA. 1992. **Utility of the peer-tutoring in the development of verbal and spatial abilities and academic achievement in Geography : An experimental study.** Ph.D., Edu. Agra Univ. Guide: Dr. P.N. Rai.

Problem: This study tries to examine the usefulness and evaluate the utility of the peer-tutoring in the development of verbal and spatial abilities and academic achievement in geography.

Objectives: (i) To conduct the teaching of geography through peer-tutoring, (ii) to study the effectiveness of peer-tutoring or scholastic achievement in the subject of geography, and (iii) to use peer-tutoring as an instrument in developing verbal and spatial abilities of the students in geography.

Methodology: The sample of the study comprised 415 subjects (214 subjects in the experimental group and 201 subjects in the control group) of Class VIII. They were selected by using non-probability method of sampling. The tools used were Intelligence Test by Malhotra and three achievement tests developed by the investigator. The collected data were treated with mean, multivariate analysis of variance and

analysis of co-variance.

Major Findings: (1) It was found that the experimental group taught by the peer-tutoring strategy, showed consistent progress in verbal ability of the subjects in geography than control group which was taught by conventional method. (2) Peer-tutoring strategy showed significant progress in experimental group in spatial ability of geography than control group in fortnightly tests. (3) The effect of peer-tutoring

on scholastic achievement in geography was that the experimental group registered significant progress in post-achievement test in comparison to the control group. (4) It was found that those students who were in the experimental group which was taught by the peer-tutoring method showed significant higher achievement in their school marks compared to their counterpart control group which was taught by the usual teaching method. [0562]

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FOREWORD

The National Council of Educational Research and Training (NCERT) has been bringing out *Indian Educational Abstracts* (IEA), which is a biannual abstracting service in the domain of educational research in India. The present issue is the sixth in the series and contains 150 abstracts covering doctoral studies, published researches in professional journals and also individual research papers. The Chief aim of IEA is to bring to the notice of the researchers the latest researches in the field of education and its cognate areas done in India.

In this issue, papers presented at the International Seminars on School Effectiveness organised by the NCERT under the aegis of the District Primary Education Programme (DPEP) during 1995, 1996 and 1997 have also been abstracted for the benefit of researchers at large.

The vision of bringing out this biannual publication has sustained itself quite satisfactorily. The success achieved is due to the cooperation extended by the doctoral researchers, editors of professional journals and other senior researchers. Simultaneously, the continued efforts put in by the project team of the NCERT constituted for the purpose, deserves a special mention and appreciation as they have not only ensured regularity in bringing out different issues of IEA but have also continued to improve the quality of the coverage and efforts at dissemination.

With the hope of making this project more broad-based in its scope, the heads of different universities and research institutions may encourage to send doctoral level work, and independent studies in their concerned departments so that IEA is able to bring out appreciable number of abstracts related to various disciplines.

This project can be strengthened and qualitatively improved only with the cooperation of researchers and it is hoped that such cooperation would continue in the years to come.

A.K. SHARMA
Director
National Council of Educational
Research and Training

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Puravi, K. 1998. **Organizational climate and teacher burnout in primary schools in Pudukkottai District.** Ph.D., Edu. *Alagappa Univ.* Guide: Dr. S. Mohan.

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Singh, Satvir; Saxena, R.R.; Jain, V.K.; Arora, O.P.; Rath, K.B.; Gupta, J.K. and Gupta, M.K. 1995. **Effect of school policies and practices on students' achievement.** In, *School Effectiveness and Learning Achievement at Primary Stage: International Perspective.* National Council of Educational Research and Training.

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LANGUAGE EDUCATION

SHAMALA, S.K. 1997. **Enhancing teaching competency through integration of art education for effective language teaching at the primary stage — A conceptual model.** In, *Teacher Empowerment and School Effectiveness at Primary Stage: International Perspective*. National Council of Educational Research and Training.

Problem: The study proposes a conceptual model that integrates Art Education activities with that of language learning activities, so that the teacher can ensure child-centred joyful learning of language.

Objectives: (i) To identify the language competencies to be mastered by Class V students, (ii) to select and utilize appropriate Art Education activities while teaching the competencies, and (iii) to prepare a conceptual model that can be used in Classes I and V to teach language effectively.

Methodology: The investigator assessed the need to make the language classrooms activity-oriented, joyful and child-centred in order to make the language learning meaningful. The alternate methods, approaches and techniques to empower the teacher were identified. The area of Art Education with its visual and performing activities was selected and various other activities were also selected and enlisted. Each competency was taught using a suitable and practicable Art Education. The listening and speaking competencies were taught using performing art activities using music, dance and drama.

Major Findings: (1) It was found that the teacher was able to develop different instructional materials and techniques. (2) The children developed confidence and mastered language competence through group work and interaction. (3) Even the slow learners developed confidence as a result of group work. [0808]

VALSAMMA, KORAH. 1994. **An investigation into the structure of reading ability of Indian students in English.** Ph.D., Edu. *Jamia Millia Islamia*. Guide: Prof. Devendra Joshi.

Problem: It attempts to study whether the reading ability in English is a unitary trait and whether differentiation of abilities takes place with increase in age and educational experience with regard to the IX and XI Grade public school students.

Objectives: (i) To secure, or to construct reading ability tests to form a reading ability test battery, (ii) to test the reading ability of children by administering this battery of reading ability tests, (iii) to identify different factors of reading ability through multivariate analysis of the data secured from the tests, and (iv) to test the differentiation hypothesis of reading ability by administering the tests upon the students of the IX and XI Grades of public schools of Delhi.

Methodology: The sample of the study comprised 400 students. Out of this, 200 students belonged to Grade IX and 200 students belonged to Grade XI from three public schools of Delhi. Their age ranged between 14 to 15 and 16 to 17 years. The tool used to collect data was a Reading Ability Test. The collected data were treated with mean, SD, 't' test, factor analysis and correlations.

Major Findings: (1) It was found that in the case of Group I reading ability did not emerge as a differentiated ability, rather it emerged as a single unitary trait. (2) In the case of Group II reading ability emerged as a differentiated ability. Here two factors of reading ability were identified. They were vocabulary factor and verbal comprehension factor. (3) It was found that the differentiation of abilities took place as children grew older. (4) The mental operations involved revealed that even if children did not achieve a high level of word knowledge they could comprehend the given passage. [0727]

YEDDI, ELNOUR ABDEL RAHMAN MOHAMMED. 1997. **A critical study of English language teaching in Sudan.** Ph.D., Eng. *Dr. Babasaheb Ambedkar Marathwada Univ.* Guide: Dr. Satish B. Deshpande.

Problem: This study addresses various issues related to English language teaching in Sudan.

Objectives: (i) To study the academic and professional qualification of the teachers of

English at the school level, (ii) to study the aims of teaching English language at the school level, (iii) to investigate the methods used in teaching of English language at the school level, (iv) to study the availability of provisions necessary for effective teaching such as teacher's handbook, teaching-aids, and co-curricular activities, and (v) to investigate into the performance of students in English.

Methodology: The sample of the study comprised 1109 students (571 Basic level and 538 secondary level) and 119 Basic level and secondary level schools were selected from urban, semi-urban and rural areas. The tools used to collect the data included questionnaires and achievement test in English. The collected data were treated with mean, SD, and percentages.

Major Findings: (1) All the teachers of English at the Basic level were holders of only secondary school certificate. (2) All the teachers of English at the secondary level were holders of only Bachelor's Degree. (3) At the Basic level the percentage of trained teacher was only 32.4% while the percentage of training among the secondary level teachers was only 20.3%. (4) 47.6% of Basic school teachers considered reading and writing skills as major objectives of ELT against 44.8% who checked listening and speaking skills. 79.7% of secondary school teachers considered reading and writing skills as major aims of ELT against only 20.3% of the same level teachers who checked speaking skill only. (5) 61.5% of Basic school teachers claimed that they use teaching aids whereas only 27.8% of the secondary school teachers claimed the same. (6) 61.6% of Basic level teachers and 66.7% of secondary level teachers complained of shortage of textbooks. 22.2% of secondary schools organised activities in English such as reading magazines and newspapers whereas only 24.2% of Basic schools checked on role playing in English as an activity organised by their schools. (7) The courses emphasized on communicative competence whereas only 27.6% of Basic level teachers and 16.6% of secondary level teachers emphasized on listening and speaking as major aims of ELT. (8) Only 33.8% of Basic level teachers and 33.3% of secondary level teachers used simple English to explain English lessons, whereas the majority of

teachers of English in both the levels switched over to Arabic language to do the same. (9) Students' achievement in English was not up to the mark. (10) The analysis of major errors of students in English showed that students did not learn the rudiments of the English grammar and they could not write simple correct sentences. [0825]

SOCIOLOGY OF EDUCATION

CLARKE, PREMA AND FULLER, BRUCE. 1996. **Life in Indian classrooms: The influence of culture and caste.** In, *Studies on Classroom Processes and School Effectiveness at Primary Stage.* National Council of Educational Research and Training.

Problem: It attempts to study the optimum levels of instructional inputs and universally effective teaching practices which boost students' achievement.

Objectives: (i) To examine the extent of variability in the use of instructional tools and patterns employed by teachers, and (ii) to study the possibility of variation being systematically organised according to the SES and possibly, caste backgrounds of students.

Methodology: The study was conducted in 50 classrooms in the city of Madras selected on the basis of stratified sampling technique. Management of schools was taken into consideration while selecting the sample. All the classroom activities were video taped and analysed qualitatively and quantitatively.

Major Findings: (1) Commonalities and variations were found in classrooms and pedagogical practices among three types of schools. (2) All the schools were found using lecture, textbook and question method for teaching. (3) It was observed that private schools had better physical facilities as compared to semi-private and municipal schools. (4) Private schools had greater teacher-student interaction as compared to government/municipal schools. (5) It was found that greater attention was paid to individual students in private schools. (6) Since caste in India is associated with class, this study illustrates the influence of local forms

of social stratification. Both quantitative and qualitative variation in pedagogic practices across private, semi-private and state funded schools suggest the subtle impact of SES and caste on classrooms in Madras. [0751]

HASEEN, TAJ. 1998. Personal values of Hindu and non-Hindu students in relation to their social class and modernization. Perspectives in Education, Vol. 14(4), 245-248.

Problem: The present study was designed to explore the influence of social class and modernization on the personal values of Hindu and non-Hindu students.

Objectives: (i) To study the differences in personal values of students belonging to different religions, (ii) to examine the influence of modernization and social class on the personal values of Hindu and non-Hindu students, (iii) to investigate the effect of family size, type of family and sex on the personal values of Hindu and non-Hindu students, and (iv) to find out the relationship between social class, modernization and personal values of Hindu and non-Hindu students.

Methodology: A sample of 400 students representing all the three types of school managements, namely government, private aided and private unaided were selected proportionately by using simple stratified random sampling procedure. Tools used included Modernization Scale by Raghavendra, S., Singh, Amarnath. and Tripathi, Ramjeebad., Values Test by Gilani and Socio-economic Status Scale by Kuppuswamy. Means, SD, 't' test and coefficient of correlations were used to analyse the data.

Major Findings: (1) On personal values, the Hindu boys and Muslim boys differed but not the girls of Hindu and Muslim communities. While the Christian boys and girls did not differ either from Hindu boys or girls or Muslim boys or girls. (2) When personal values of students with high and low SES, and students with larger and smaller family were compared, it was found that students with high SES and those belonging to larger family size were found to have higher personal values as compared to their counterparts. (3) Students with low modernity

were found to possess higher personal values than their counterparts. (4) There existed a significant negative relationship between social class and modernization. (5) The personal values of Christian and Muslim students were influenced by modernization but not among Hindu students. (6) The personal values of students with different religious backgrounds were different. [0793]

RAMBABU, P. 1998. Sustenance of slum improvement programme in Visakhapatnam, Andhra Pradesh. Ph.D., Edu. Andhra Univ. Guide: Dr. B.S. Vasudeva Rao.

Problem: The present study focuses on the rapid growth of cities which will inevitably lead to the creation of the slums which in turn hamper the urban development.

Objectives: (i) To assess the maintenance of various facilities provided in the slum improvement project, the existing state of these facilities were assumed to reflect the maintenance, and in turn the sustenance of the slum improvement projects, and (ii) to examine the role of Neighbourhood Committees in sustenance of the slum improvement programme.

Methodology: The study was conducted in three phases: Phase I: Survey of slums were undertaken in order to evaluate the existing level of maintenance of the various developmental activities taken up during the slum improvement project. Phase II: Detailed survey of six slums selected from phase I on the basis of level of sustenance were undertaken. In each slum executive members of the Neighbourhood Committees and random sample of slum dwellers were interviewed and data relating to the committees was obtained. Data were also collected from the project staff on sustenance aspects of the slum improvement programme. Phase III: A detailed survey of three slums (one each from the three categories of sustenance) was conducted. This survey examined the issue of sustenance from different angle i.e. the extent to which the slum dwellers integrated themselves into the mainstream of the society by way of acquiring facilities, occupations, self development and community development.

Major Findings: (1) There was a noticeable difference across the slums in the utilization and maintenance of educational facilities. These facilities were being utilized properly and completely in the well sustained slums. (2) The constitution and functioning of the NHC significantly influenced the sustenance of slum improvement programme and the effectiveness of the NHC was further dependent on the support of the project staff and the community in general. Political interferences and caste/group differences hampered the functioning of these committees. In some cases these committees were not representative of the total slum. (3) Significant proportions of the slum dwellers had ownership over the land on which they were staying. Most of them were self-employed indicating that they developed the qualities necessary for becoming enterprising. (4) There seemed to be general improvement in the quality of life in the slums, since all the households acquired necessary domestic and other implements. Significant percentage opted for family planning. It also indicated that the slum dwellers purchasing capacity increased. (5) The slum dwellers indicated that there was an improvement in their ability to manage themselves and any crisis they encounter. Their personal development was very encouraging. [0811]

SAHOO, SUBARNALATA. 1993. **Child-rearing practices by mothers in rural western Orissa: An analysis of data from some selected villages of Sambalpur District.** Ph.D., Home Sc. Sambalpur Univ. Guide: Prof. S.N. Rathia.

Problem: The study is designed to investigate the prevailing child-rearing practices among the rural Hindu inhabitants of Western Orissa and assess the influences of socio-cultural and economic background of the family in general and that of the rearer in particular.

Objectives: (i) To evaluate the child-rearing practices of the respondents in terms of their own literacy, educational level and educational standard of their husband, (ii) to associate the child-rearing practices to the occupation of the respondents and their husband, (iii) to measure the child-rearing efficiency in terms of differences in the family income, (iv) to assess the child-rearing efficiency of respondents of different age

group, and (v) to compare the rearing practices of the respondents of large families with those from medium and small families.

Methodology: The sample for the present study was selected from Sambalpur District of Orissa, covering mothers of having at least one child within six years of age. The final sample comprised 268 such children. Questionnaire was used as a tool to collect the data. The collected data were treated with percentages and chi-square.

Major Findings: (1) Socio-economic status was significantly related to child-rearing practices. (2) Education of the respondent's husband was related to child-rearing practices. (3) Occupation of the respondent's husband was significantly associated with child-rearing practices. (4) Family income was highly associated with child-rearing practices. (5) Respondent's education was highly associated with child-rearing practices. (6) Respondent's occupation was associated with her child-rearing expertise. (7) Gender bias did not seem to exist in rearing practices. (8) Respondent's age also did not seem to influence her rearing ability. (9) Caste affiliation of the respondent influenced her rearing efficiency to a great extent. (10) Good rearers came from nuclear families. Good child-rearing was significantly associated with the structure of families. (11) The size of the family did not seem to project any significant influence on the quality of child-rearing. (12) Number of children in the family and their ordinal position also did not reveal any significant influence on the quality of child-rearing. [0812]

ECONOMICS OF EDUCATION

LOH, JACKIE. 1995. **Education and economic growth in India: An aggregate production function approach.** In, *School Effectiveness and Learning Achievement at Primary Stage: International Perspective.* National Council of Educational Research and Training.

Problem: This is an attempt to quantify the macro contribution of education to economic growth in India using pooled state level data to estimate an aggregate production function that explicitly includes human capital as one of the three inputs to production.

Objective: To quantify the macro contribution of education to economic growth in India, using the estimation of the aggregate production function.

Methodology: The sample of the study included all 25 Indian states but not the UTs. The relevant information was gathered through Govt. of India Census Reports (1961 to 1991) and "Selected Educational Statistics". The collected data were analysed using Correlation and Regression Analysis.

Major Findings: (1) The observations from the period (1961-1971) made no useful contribution to the estimation of the aggregate production function, as almost all the regression coefficients were insignificant. (2) The regression results for the period (1971-1991) were quite significant. The results indicated that education had a sizable effect on economic growth in India. Further, increasing primary education level had nearly twice the potential influence on economic growth than increase in total year of schooling. [0747]

PSYCHOLOGY OF EDUCATION

ASTHANA, BHAWANA. 1993. **Vyaktitva per sangeet adhyayan ka prabhav (The effect of music on the personality make up)**. Ph.D., Edu. Dr. B.R. Ambedker Univ. Guide: Dr. (Smt.) Shruti Kumar.

Problem: The study is centred to see the effect of music education on the personality make up of subjects belonging to different socio-economic status.

Objectives: (i) To identify the socio-economic status of subjects under the study, and (ii) to see the effect of music education on the personality make up of subjects having different socio-economic status.

Methodology: The study was conducted on 594 girls which included 187 music and 209, non-music girls, 106 and 92 music and non-music girls belonging to higher, middle and lower middle socio-economic status groups. Quota sampling method was used to select the sample. The tools used included Socio-Economic Status Scale (urban) by Gyanendra P., Shrivastava and Sixteen Personality Factor Questionnaire by R.B.

Cattell. To compare the personality make up of music and non-music students 't' test was used.

Major Findings: (1) Music girls belonging to higher-middle socio-economic status of Intermediate obtained higher mean in 'I' personality factor. (2) Music girls of B.A. belonging to higher-middle socio-economic status obtained higher mean in 'C, G, I and Q₁' personality factors. (3) Lower middle socio-economic status music girls of Intermediate obtained higher mean in 'H' and 'I' personality factors. (4) Music girls of lower middle socio-economic status of B.A. obtained higher mean in C, H, I, Q₃ & Q₄ personality factors. [0694]

KUMAR, P.K. SUDHEESH. 1997. **Learning style: A multidimensional approach and its effect on secondary school biology**. *Experiments in Education*, Vol. XXV(12), 233-37

Problem: It attempts to study the effect of learning style on achievement in secondary school biology.

Objectives: (i) To construct and standardise a multidimensional learning style inventory, and (ii) to assess the effect of learning style on achievement in biology.

Methodology: The final sample of the study consisted of 329 boys, 321 girls, 471 rural and 179 urban, thereby making it 650. The students were drawn through stratified sampling technique. The tools used to collect the data included Learning Style Inventory and an Achievement Test in Biology by Kumar. The collected data were analysed through one way ANOVA.

Major Findings: (1) It was found that learning style had significant main effect on achievement in biology of secondary school students (Total, girls rural and urban samples). (2) But in the case of the sub sample boys, no significant main effect of learning style on achievement in biology was found. [0702].

PACHAURY, A.C. 1996. **A study of weaker section child's ability to deduce verbal transitive inference**. In, *Studies on Classroom Processes and School Effectiveness at Primary Stage*. National Council of Educational Research and Training.

Problem: This study attempts to study the ability of a weaker section child to deduce verbal transitive inference.

Objective: To find out whether any differences exist among Grade VII children belonging to weaker sections of varying ethno-rural background on the ability to deduce verbal transitive inference.

Methodology: The sample of the study comprised 78 children of Grade VII belonging to varying ethnic groups of rural background – the Baiga, the Gond, the OBC Muslims and the OBC Hindus.

Major Findings: (1) None of the ethnic group's performance had reached the criterion of 75 % as set forth by Piaget. (2) About 60% of the subjects failed to deduce verbal transitive inference. (3) The development of verbal logical thinking is delayed in Indian children. [0769]

PACHAURY, A.C. 1997. **Effect of school on categorization behaviour of the fifth Grade Dangi children.** In, *Teacher Empowerment and School Effectiveness at Primary Stage: International Perspective*. National Council of Educational Research and Training.

Problem: The present study examines how Dangi children of fifth Grade attending different types of schools of Ahwa Block would perform on the 2 x 2 matrices tasks that need coordination of two attributes simultaneously.

Objective: To ascertain the development of categorization behaviour in fifth Grade Dangi children, who attended the Convent, Panchayat/ Taluka and Village schools of Ahwa Block of Dangs District (Gujarat State).

Methodology: The ex-post-facto design has been used on 123 Dangi and 32 non-Dangi children of fifth Grade, who were selected from the schools of Ahwa Block. Data were collected through interviews and they were individually administered three Piagetian type of 2 x 2 matrices tasks in the fixed order.

Major Findings: (1) Delay of three to five years was shown by the sampled Ss on the development of categorization behaviour related

to coordination of two attributes simultaneously. (2) There did not exist any significant difference among the boys as well as among the girls of these schools on this categorization ability. Gender differences were also silent within a school on these tasks. (3) No significant difference existed between the Dangi and non-Dangi Ss' performance on these administered tasks. (4) Significant differences existed between the selection of the right options and the distractors. (5) Secondary analyses revealed that about one-third of the Ss committed size, shape, and colour (32%) constancy errors, while 10% to 22% of them committed size/colour errors, 17% succeeded on all the three tasks, but 5% of them failed in II-III tasks. [0781]

VERMA, B.P. 1997. **The family climate and creative personality.** *Journal of Educational Research and Extension*, Vol. 34(2), 25-33.

Problem: This study intends to investigate the relationship between family climate and creative personality of adolescents.

Objectives: (i) To find out the significant relationship between family climate and creative personality of adolescents, and (ii) to find out the significant differences in creative personality of adolescents coming from good (high), average and poor (low) family climates.

Methodology: The sample of the study comprised 200 adolescent girls of Grades XI and XII, drawn through random cluster sampling technique from two randomly selected senior secondary institutions of Shimla (H.P.). The girls belonged to arts stream only. The tools used to collect data included Family Climate Scale (FCS) by Beena Shah and Hindi version of "What kind of person are you?" of Torrance and Khatena, prepared by Dadrun Nisha and Kiran Gupta. The collected data were analysed using mean, SD, 't' test and coefficient of correlation.

Major Findings: (1) Creative personality was found to be significantly positively related to family climate. (2) The significant differences were observed in creative personality of adolescents belonging to high family climate, average family climate and low family climate. [0710]

COGNITIVE PROCESSES

KUMAR, P.K. SUDHEESH. 1998. **Interaction of approaches to studying and cognitive style on achievement in biological science.** *Experiments in Education*, Vol. XXVI (2), 28-33.

Problem: In the present study an attempt has been made to explore the extent of the effects of approaches to studying and cognitive style on achievement in biological science.

Objective: To study whether achievement in secondary school biology varies with different levels of approaches to studying and cognitive style of the students.

Methodology: The sample comprised 700 secondary school students drawn from 11 secondary schools in three revenue districts of Kerala. They were selected through proportionate stratified sampling method. Tools used in the study included Science Studying Approach Inventory (SSAI) by Pillai, *et al.*, Group Embedded Figure Test by Oltman *et al.* and Achievement Test in Biology by Kumar. The collected data were treated with mean, SD 't' test and two-way ANOVA.

Major Findings: (1) Significant main effect of only Deep/Surface Approach on achievement in secondary school biology was observed, (2) No significant main effect of organised/disorganised method of study on achievement in biology was observed, (3) No significant first-order interaction of approaches to studying (deep/surface and organised/disorganised dimension) and cognitive-style was observed, (4) It was found that the Deep Approach and Surface Approach Group of students differed significantly in their mean achievement in secondary school biology and high mean achievement score in biology was seen associated with the Deep Approach of students. [0704]

MAHAPATRA, MADHURI. 1996. **Assessment of the cognitive development level of the primary stage pupils.** In, *Studies on Classroom Processes and School Effectiveness at Primary Stage*. National Council of Educational Research and Training.

Problem: This study assesses the cognitive development level of the primary stage pupils with a special reference to sex/gender.

Objective: To ascertain and compare the level of cognitive development of boys and girls belonging to the same chronological age with a view to finding out whether a special curriculum is needed for girls to improve their education at primary level.

Methodology: The sample of the study comprised 127 students including both boys and girls of Classes III and IV of Demonstration Multipurpose School, Bhubaneswar. The Science Reasoning Task (SRT) developed by CSMS group on Volume and Heaviness was used as a tool to collect the data.

Major Findings: (1) It was found that the pupils of the same chronological age did not belong to the same cognitive development level. (2) At higher level of cognitive development the percentage of boys was found to be higher than the girls, (3) The mean scores of boys of Classes III and IV were higher than the girls though not significant. [0773]

MOLIA, M.S. 1997. **A study of an effect of cognitive thought process, meta-cognitive process, and counter suggestion process on achievement in mathematics.** Ph.D., Edu. Saurashtra Univ. Guide: Dr. N.S. Donga.

Problem: This study centred upon learning process in mathematical achievement at secondary school level in relation to Cognitive Thought Process (CTP) programme, Meta-Cognitive Process Programme (MCP) and Counter Suggestion Process (CSP) programme.

Objectives: (i) To study the effectiveness of cognitive thought process programme, meta-cognitive process programme and counter suggestion process programme with respect to mathematical achievement, knowledge scores, understanding scores, application scores and mathematical skill scores of the students, (ii) to study the characteristics of frequency distribution with reference to learning process scores to the students of different groups taught through different programmes, (iii) to study the effectiveness of cognitive thought process

programme, meta-cognitive process programme and counter suggestion process programme with respect to learning process scores of the students, and (iv) to analyse the learning process adopted by the students learned through cognitive thought process programme, meta-cognitive process programme and counter suggestion process programme.

Methodology: The sample comprised 132 students of Standard IX from Shri Saurashtra High School, Rajkot. These 132 students were randomly classified into four groups. In each group, there were thirty-three students. The tools used to collect data were Mathematical Achievement Test and an Interview Schedule. The collected data were treated with mean, ANOVA and Scheffe's test.

Major Findings: (1) The scores of each of the four groups on mathematical achievement test were positively skewed and stable. (2) The mathematical achievement of CTP group was higher than that of the other three groups. The mathematical achievement of MCP group and CSP group was higher than that of conventional teaching CT. (3) The achievement of knowledge of mathematics of CTP group was higher than that of the other three groups. The achievement of knowledge of mathematics of MCP group and CSP group was higher than that of CT group. (4) The achievement of understanding in mathematics of CTP group was higher than that of the other three groups. The achievement of understanding in mathematics of MCP group and CSP group was higher than that of CT group. (5) The achievement of application of mathematics of CTP group was higher than that of the other three groups. (6) The achievement of mathematical skill of CTP group was higher than that of the other three groups. (7) The scores of CTP group, MCP group and CSP group on learning process interview were negatively skewed and CT group was positively skewed. (8) The achievement of learning process of CTP group was better than that of CSP group and CT group. The achievement of learning process of MCP group and CSP group was better than that of CT group. [0695]

YADAV, R.S. 1995. **A composite model of cognitive, psychomotor and affective domain abilities: A factor analytical study.** D.Lit., Edu. Hemwari Nandan Bahuguna Garhwal Univ.

Problem: The present study makes an attempt to synthesise three domain taxonomies into a composite model of the cognitive, the psychomotor and the affective domain abilities.

Objectives: (i) To find out the relative effectiveness of discovery method (i.e. effectiveness of advanced method of teaching) over lecture method at different intellectual levels of development, and within the high developed taxonomy hierarchies of teaching, learning and evaluation in cognitive, psychomotor, and affective domains, respectively. (ii) to assess the feasibility of the newly developed advanced taxonomy hierarchies in three domains, respectively and (iii) to integrate the three domain, taxonomy hierarchy of teaching, hearing and evaluation in a composite model.

Methodology: A sample comprised 106 high schools students who were drawn randomly. Tools used included academic achievement test and IQ test. The collected data were treated with 't' test and factor analysis.

Major Findings: (1) The proposed hierarchical order of cognitive objectives as knowledge, understanding, application, discovery, evaluation, and creativity was established logically and empirically. (2) The hierarchical order of psychomotor objectives as imitation, basic original movements, speed, impulsion, precision, flexibility, perceptual abilities and coordination was established in terms of factor analytical theory logically and empirically. (3) The taxonomy order of evaluational objective proposed as receiving, responding, interest, appreciation, attitude, values, adjustment and characterisation was established empirically. (4) The order of learning in terms of; from lower to higher order in case of increasing difficulty levels of learning ranged from the psychomotor to the affective to the cognitive in the building up of a teaching-learning theory. [0716]

CREATIVITY AND INNOVATIONS

JOMON, M.G. 1996. **Towards creative learning – A shift in paradigm.** In, *Studies on Classroom Processes and School Effectiveness at Primary Stage*. National Council of Educational Research and Training.

Problem: It attempts to study the impact of creative educational environment of learning and performance.

Objectives: (i) To study the present approach and methodology of the curriculum and school systems of primary schools, (ii) to explore the responses of the students towards the existing educational system and observe their learning behaviour and pace, (iii) to observe the responses of the students towards creative environment, methods and process of learning, and (iv) to find out the impact of creative educational environment of learning and performance.

Methodology: The sample comprised three groups of students – blind, normal and slum schools. Within each of the groups two sections were identified A and B. All the sections were given training over a period of 4 months, 2 days per week with 2 hours. However, B section (Experimental Groups) was given extra creativity inputs. At regular intervals student's performance was observed and documented, and tests given before and after the training period.

Major Findings: (1) Creative methods, approaches and processes made learning faster and more effective. (2) Creative learning environment, processes and methods improved the students' performance in the examination, and in other extra curricular activities. (3) There was no correlation between sex and learning, better socio-economic status and learning, and handicap and learning. All the three groups responded to creative methodologies of learning and environment. (4) Children exposed to a creative environment and methodology took up further responsibilities. (5) Attendance level of children in the experimental groups improved as compared to those in the control groups. (6) Parent-teacher-peer group networks helped in the learning process. [0834]

CURRICULUM DEVELOPMENT

KAUL, V.; GUPTA, D.; BALA, N. AND BARBHUYA, A.R. 1995. **Readability assessment of primary level textbooks.** In, *School Effectiveness and Learning Achievement at Primary Stage: International Perspective*. National Council of Educational Research and Training

Problem: The present study seeks to find out to the extent to which the textbooks at primary stage are readable in terms of vocabulary, conceptual difficulty and syntax, and cater to the diverse linguistic needs and levels of children in different geographical context in a state.

Objective: To evaluate the readability level of primary level textbooks, provide information for in-service teacher training in the use of existing textbooks, and guide the preparation of new textbooks so that they are readable better.

Methodology: The sample of the study comprised in all 14 rural, 12 urban and 10 tribal schools which were selected covering 168 boys and 205 girls from rural schools; 246 boys and 198 girls from urban schools, and 98 boys and 95 girls from tribal schools. In addition to this, 84 teachers were selected across the six states. The tools used to collect the data included; Curriculum Based Assessment Test, Reading and Writing Test and Semi-structured Interview Schedule.

Major Findings: (1) Language textbooks were easier in Maharashtra, Assam, Kerala and Tamil Nadu and relatively difficult for Haryana and Karnataka. (2) EVS I textbooks were easier than EVS II textbooks. (3) Mathematics textbooks were mostly difficult. (4) The overall difficulty level of mathematics and EVS II textbooks were due to the inclusion of technical complex terminology. (5) Language books were directly used by children, while EVS and maths books were used as guides. [0746]

PRE-PRIMARY EDUCATION

DUTTA, USHA. 1996. **Alternatives to reduce stress on pre-school children.** In, *Studies on Classroom Processes and School Effectiveness at Primary Stage*. National Council of Educational Research and Training.

Problem: It attempts to study the methodology being practised in primary schools and find out the alternatives to reduce the burden of pre-school children.

Objective: To find out the actual methodology practised in schools and searched for alternatives to reduce stress in the pre-school children.

Methodology: The sample of the study comprised twenty-two pre-schools from three districts of Rajasthan, i.e., Kota, Bara and Bundi. Based on an interview schedule prepared by the investigator, the principals/teachers of pre-schools were interviewed to collect the relevant information. The field study also took stock of the toys used in pre-schools. The data were analysed qualitatively.

Major Findings: (1) The schools used stocked wooden, plastic, paper, metallic and clay toys. These toys were either prepared by children themselves or bought from market or had been donated. (2) Group songs, drama and role playing were found to be powerful approaches to reduce stress in pre-schools. [0772]

KAUL, V.; DADHICH, M. AND SONI, R. 1995. **Process-based readiness programme for primary level mathematics: A longitudinal study.** In, *School Effectiveness and Learning Achievement at Primary Stage: International Perspective*. National Council of Educational Research and Training.

Problem: It attempts to study the development of number readiness at the pre-primary stage and assess the impact of the developed process-based programme in the subsequent learning of mathematics in early primary orders, using a longitudinal design.

Objective: To develop, empirically try out and evaluate a systematic process based programme for development of number readiness at the pre-primary stage and study its impact on subsequent learning of mathematics.

Methodology: The experimental and control samples were initially selected on a random basis involving 20, 20, 10 and 10 children respectively in the four samples. After three years, the number

came down to 10, 10, 5 and 10 children respectively in the 4 samples under study. The collected data were treated with mean, SD and 't' test.

Major Findings: (1) It was found that the cognitively oriented intervention programmed to the development of the expected level of number readiness in the children. (2) In comparison to the Control Groups I and II, the experimental group had consistently demonstrated a superior performance across the three grades for all the nine variables excepting on concept of money for which the performance of Control Group II was found to be better in Grade II. (3) In comparison to the Control Group III, with the exception of some variables in Grade I, the means of the experimental group were consistently higher for all nine variables in other three grades. [0744]

PRIMARY EDUCATION

AMBASHT, N.K. AND RATH, K.B. 1995. **A study of the effect of household, community and school factors on the enrolment, retention and achievement of Scheduled Tribes children at primary level.** In, *School Effectiveness and Learning Achievement at Primary Stage: International Perspective*. National Council of Educational Research and Training.

Problem: The present study tries to examine the effect of household, community and school factors on the enrolment, retention and achievement of Scheduled Tribe children at primary level.

Objective: To find out the effect of household community and school factors on enrolment, retention and achievement of the ST children.

Methodology: The study examined Baseline Achievement Study data of 15,623 students including 2,076 Scheduled Tribes students. It also covered 1205 schools having 576 tribal children, 3,320 teachers with 1,604 teachers who had tribal children in their schools, 538 teachers, 164 head teachers, 149 village heads, 2,049 parents, 526 community teachers, 1,652 school going learners and 9,688 non-school

going learners. The data were analysed statistically using analysis of variance, chi-square and correlation.

Major Findings: (1) The school curriculum was not suited to the needs of tribal children. (2) NFE schemes were not properly implemented. (3) Parents education and help received from the family had significant effect on the achievement of students both in language and mathematics. (4) Major factors influencing low enrolment and retention of children were absence of reference to tribal life and culture in textbooks and other learning experiences and non-utilization of tribal dialect as medium of instruction. (5) Teacher attendance, homework and mid-day meal were found to be positively related to tribal students' enrolment. [0734]

ASTHANA, MEENAXI. 1993. **A study of socio-psychological correlates of dropouts of senior basic level.** Ph.D., Edu. Rohilkhand Univ. Guide: Dr. Beena Shah.

Problem: This study examines the socio-psychological correlates of dropouts of senior basic level.

Objectives: (i) To assess the socio-psychological correlates of dropouts, (ii) to compare the socio-psychological variables of dropouts and non-dropouts belonged to the same locality (urban/rural), (iii) to find out the differences between dropouts and non-dropouts if any on the various socio-psychological variables with the variation in sex (boys/girls), and (iv) to know the views of teacher and parents regarding the causes of dropouts.

Methodology: The sample of the study comprised 156 dropout students and 200 non-dropout students (belonging to both the sexes) of Classes V to VIII from rural and urban areas of Bareilly and Rampur Districts in Rohilkhand region. The tools used were Educational Problem Questionnaire (EPQ), Intelligence Test (IT), Level of Aspiration Scale (LOAS), Adjustment Inventory (AI) and Schedule on Educational Problems of Dropouts for Guardians and Teachers. The collected data were treated with mean, SD, 't' test and percentages.

Major Findings: (1) With regard to sociological

correlates adjustment with examination and curriculum was found to be a significant correlate of dropouts for all groups. (2) The dropout students felt more problems including adjustment, homework, timetable, attending school and were less satisfied with classroom teaching as compared to their non dropout counterparts. (3) There existed a significant relationship between socio-economic factors of the family and dropout. (4) Parental encouragement and atmosphere of the family were found to be significantly correlated to dropout phenomena. (5) Other factors which correlated significantly to the dropout phenomena included non-availability of adequate library and readingroom facility, non-receipt of scholarship, unacceptable school traditions, prejudices and taboos. (6) With regard to the psychological correlates, it was found that the dropout was significantly correlated with intelligence, unrealistic aspirations and maladjustment with a specific reference to emotional area. (7) According to parents the main reasons for their children to dropout included poverty, sex-biasness of the society and difficult course contents. (8) According to teachers, students drop out because of poverty, low educational status and low awareness of parents, sex discrimination and difficult subjects. [0737]

BARPANDA, NIRUPAMA. 1997. **Teacher empowerment strategies to ensure community involvement in universalisation of elementary education: A case study of tribal areas of Sambalpur District.** In, *Teacher Empowerment and School Effectiveness at Primary Stage: International Perspective.* National Council of Educational Research and Training.

Problem: The study is based on case study method and attempts to find out the innovative elements of the project related to teacher empowerment strategies to ensure community involvement and find out the extent of success achieved by the project in ensuring enrolment and retention.

Objectives: (i) To find out the innovative elements of the project related to teacher empowerment strategies to ensure community involvement,

and (ii) to find out the extent of success achieved by the project in ensuring enrolment and retention.

Methodology: The sample of the study comprised fifteen experimental non-formal education centres being run by the rural and tribal people of Jujumura Block of Sambalpur. Tools and techniques used in the study included official records of the implementing agency, reports submitted to the Ministry of Human Resource Development, observation of the programme and interviews with the teachers, community members, and members of the implementing agency. Collected data were analysed both qualitatively and quantitatively.

Major Findings: (1) The rate of enrolment increased from 36% in 1991 to 100% in 1996. (2) The rate of retention scaled up from 14% in 1991 to 93% in 1996. (3) The 7% drop-out was mostly because of migration of parents. (4) Among the girls, 97% children had been able to avail the opportunity to study at the primary stage. (5) According to Meghpal experiment, teacher had number of roles to perform viz. the dialogue setter, the community organiser, the curriculum planner, the syllabus designer, the facilitator, the evaluator, the fund raiser, the financial adviser, the text writer, the innovator, the researcher, the health guide, and the counsellor. [0805]

CHAKRABARTI, SHARMISTHA. 1996. **Non-detention policy and drop-out in primary education.** In, *Studies on Classroom Processes and School Effectiveness at Primary Stage*, National Council of Educational Research and Training.

Problem: The study attempts to assess the impact of non-detention policy on drop-out rate and achievement level of primary school children.

Objective: To find out the impact of non-detention policy on drop-out rate and achievement levels of children and its relevance to the effective implementation of DPEP.

Methodology: The sample of the study comprised 1608 students who were admitted to Class I during the academic sessions 1974 to 1988. The

students were selected from four schools belonging to Magrahat I Block of South 24 Parganas district. The tools used included a questionnaire, achievement level test prepared by SCERT, and apart from these, students' attendance registers were also taken into consideration. The collected data were treated with percentage, mean, SD, 't' value and 'Z' value.

Major Findings: (1) Drop-out rate at Class III level was higher as compared to Classes I and II. (2) Drop-out rate was lower in the second phase (1984-88) as compared to the first phase (1974). (3) Percentage of girl drop-outs was higher as compared to boys. (4) Mere declaration of non-detention policy was not enough to reduce stagnation and drop-out rate. [0767]

DAVE, PRAFUL. 1995. **Project Primary Education Curriculum Renewal: An evaluative study.** In, *School Effectiveness and Learning Achievement at Primary Stage: International Perspective*, National Council of Educational Research and Training.

Problem: It attempts to evaluate the primary education curriculum and instructional materials catering to educational needs of diverse groups of disadvantaged children.

Objectives: (i) To ascertain the extent to which the minimum learning competencies were developed in the pupils of project schools, and (ii) to investigate the relationship of pupil factors, school factors and socio-cultural factors to pupil achievement.

Methodology: The sample of the study comprised 1,30,510 pupils of Classes I to IV of the randomly selected 74 project schools and 73 non-project schools situated in 23 States/UTs. The tools used to collect the data included Criterion Referenced Achievement Test in Language, Mathematics and EVS for Classes I-IV, apart from School and Pupil Information Blanks. The data were analysed using mean, SD, 't' test, ANOVA and regression analysis.

Major Findings: (1) The achievement of pupils of project schools in language, mathematics and EVS in Classes I-IV were significantly higher than that of the pupils of non-project schools.

(2) The learning achievement of pupils in language, mathematics and EVS was good in Classes I and II, average in Class III and poor in Class IV. The pupils seemed to have experienced learning difficulties from Class III onwards irrespective of old or new curriculum. (3) Wide differences existed in learning achievements of project schools in various States/UTs. [0743]

GOEL, SUSHIL KUMAR. 1996. **Identification of learning problems in arithmetic and remedial teaching for children in Standard I.** In, *Studies on Classroom Processes and School Effectiveness at Primary Stage*. National Council of Educational Research and Training.

Problem: The present study identifies learning problems in arithmetic and remedial teaching for Class I children.

Objective: To identify learning problems of Standard I children in Arithmetic and suggest remedial measures for improvement.

Methodology: The sample of the study consisted of 40 children who had poor academic achievement in UKG and Standard I with an IQ range of 95 to 120. The tool used to collect the data included a questionnaire. The data were analysed statistically using mean, SD and 't' test.

Major Findings: (1) The performance of students at Representation level (R) was far better than their performance at abstract level (A). (2) The performance of students at the Concrete level (C) was found better than their performance for the corresponding items at representation level and abstract level. (3) It was suggested that actual manipulation of concrete objects is essential for alteration of mental structures and development of concepts. [0753]

GUHA ROY, S.; MITRA, S.K. AND ROY, SURJA SANKAR. 1995. **Evaluation of attainment level of primary students: The West Bengal. Example.** In, *School Effectiveness and Learning Achievement at Primary Stage: International Perspective*. National Council of Educational Research and Training.

Problem: The study attempts to ascertain through

suitable tests, how far minimum learning had been achieved by students in three subjects namely, mother tongue, mathematics and environmental studies at the end of Class IV.

Objective: To find out whether the quality of primary education has matched its quantity by ascertaining the achievement level of students of West Bengal at the end of Class IV.

Methodology: District-wise sample of schools was taken totalling 882 schools from 17 districts using random-sampling procedure. The number of Class IV students of a school restricted to 20. The tools used to collect the data included three achievement tests, using multiple-choice type and free-response type questions in mother tongue, mathematics, and EVS. Mean and SD were used to treat the collected data.

Major Findings: (1) It was found that the mean scores for language, maths and EVS were much below the Minimum Expected Scores (MES). (2) The students of government schools from socio-economically privileged section of society scored higher in all the three subjects, than the other group. (3) For urban and rural students, and for boys and girls, there was hardly any difference in achievement. (4) Impact of mother's education on learners' achievement appeared to be greater than father's education. (5) Students from small families also performed better than moderate or large sized families. [0741]

GUPTA, J.K. and GUPTA, M.K. 1995. **Effect of state interventions on pupil's achievement.** *Indian Educational Review*, Vol. 30(1), 71-85.

Problem: It attempts to study the effects of Operation Blackboard (OB) and incentive schemes on pupil's achievement and language.

Objectives: (i) To study as to what extent schools under OB scheme differ from non-OB schools in terms of pupils' achievement in mathematics and language, and (ii) to study the extent of influences of incentive scheme on the achievement of pupils in mathematics and language.

Methodology: The sample of the study comprised 1,746 schools, of which 1,045 schools were covered under the OB scheme. These schools

were selected from 43 districts of the eight states covered under the Baseline Assessment Studies (BAS). The tools used to collect the data were school schedule, pupil schedule and achievement test of Shukla. The collected data were treated with mean, SD, 't' test and Hierarchical Linear Model analysis.

Major Findings: (1) The OB scheme had shown a positive and statistically significant impact on mathematics and language achievement in the states of Assam, Kerala and Madhya Pradesh, after controlling for the effects of pupil background variables. (2) The effect size of the OB scheme on mathematics and language achievement was found to be positive but not statistically significant in the states of Karnataka, Orissa and Tamil Nadu. (3) In Haryana and Maharashtra, the mean performance was relatively low in OB schools as compared to non-OB schools. (4) The effect size of the OB scheme became significant, after controlling the effects of contextual variables, in Assam on mathematics achievement, in Kerala on language achievement, and on mathematics and language achievement in Maharashtra. (5) There existed a positive and significant impact of the OB scheme on the average achievement in both mathematics and language. OB scheme had a positive impact on learner's achievement. (6) The items supplied under the OB scheme had contributed significantly towards improving the pupils' achievement in the states of Haryana, Karnataka and Madhya Pradesh. (7) Supply of free textbooks had positive and significant impact on both mathematics and language achievement in Madhya Pradesh whereas provision of mid-day meals in schools had significant effect on language achievement only. Scholarship for regular attendance had a positive and significant impact on language achievement in Kerala. [0724]

JAIN, S.C. 1997. **Child-centred interactive activities: A new look at instruction and continuous evaluation for mastery learning.** In *Teacher Empowerment and School Effectiveness at Primary Stage: International Perspective*. National Council of Educational Research and Training.

Problem: The present study tries to find out the effectiveness of organizing the continuous

evaluation of the performance of students even while they continue with the instruction and also at the end of instruction for monitoring the progress in learning by the learners.

Objectives: (i) To develop a strategy for organizing the continuous evaluation of the performance of students even while they continue with the instruction and also at the end of instruction, (ii) to collect the available necessary instructional material and develop a set of child-centred activities for each step of a given concept, (iii) to organise a set of child-centred activities for each step i.e. exemplar activity, guided activities and independent practice activities, (iv) to use these activities for instruction and continuous assessment of the performance of students during instruction of a concept, at the end of instruction and after certain interval of time, (v) to diagnose the deficiencies in learning at various stages of instruction and timely organisation of remedial measures to monitor progress in learning by the learners, and (vi) to find out the effectiveness of continuous evaluation and remedial measures for achieving mastery level learning by the learners.

Methodology: A set of child-centred activities (exemplar, guided and independent practice activities) on each of the six steps of a selected concept from primary school mathematics was conducted on 30 students of Grade IV, selected randomly from a rural government school near Ajmer City.

Major Findings: (1) After conducting the instruction using an exemplar activity, about 45% to 70% students were not able to perform the similar tasks successfully. (2) Even after conducting guided activity and providing remedial teaching to three students about 25% to 40% students could not perform the similar tasks successfully. But after organising guided activity and independent practice activities, about 80% to 95% of these students performed the similar tasks successfully. (3) Between the two groups of successful and unsuccessful guided activity solver, there was not any significant difference on the score of each activity of post-test. (4) In spite of failure in solving the guided and independent practice tasks at the initial stage, the remedial measures taken by the teachers helped most of the learners in performing the similar tasks successfully. [0780]

JANGRAH, C. 1998. **Learning styles of primary school children.** *Experiments in Education*, Vol.XXVI(2), 34-40.

Problem: It attempts to study the learning styles of primary school children.

Objectives: (i) To know the types of cognitive styles prevalent among primary school children, (ii) to ascertain whether individual differences in cognitive styles exist among the primary school children, and (iii) to understand the relation between cognitive style and level of language development among the primary school children.

Methodology: A sample of the study comprised 450 primary school children belonging to affluent, middle, very backward and disadvantaged section of the society, who were studying in Classes III, IV and V, were drawn randomly from three different types of schools namely, Government (270), aided (60), and privately managed (120) of Hyderabad District. Their age ranged between 7+ to 13+ years. The tools used to collect the data included Children's Embedded Figures Test of Witkins, Locus of Control Test and Writing Ability Test by John L. Luckner and Stephen Isaacson. The collected data were analysed with analysis of variance and correlation.

Major Findings: (1) It was found that the type of school, sex, family, income and rank had no significant influence on EFT time. Whereas grade, age, father's education, father's occupation, mother's education and mother's occupation had considerable influence on the EFT time. (2) The type of school, age, father's education and father's occupation had significant influence on EFT score, but it was found that grade, sex, type of family, income, mother's education, mother's occupation and rank had no significant influence on EFT score. (3) It was observed that the type of school, income, father's occupation, father's education, mother's education and mother's occupation had significant influence on LOC, whereas the grade, age, sex and rank had no significant influence on LOC. (4) The type of school, grade, children's locus of control and the cognitive ability of the children had significant influence on writing skills, whereas it was found that sex had no significant influence on LOC. [0705]

KAMAT, KUSUM. 1997. **Programme for upgradation of achievement of children studying in Grades I to IV of municipal primary schools (Marathi medium) 'S' ward, Mumbai by empowering teachers.** In, *Teacher Empowerment and School Effectiveness at Primary Stage: International Perspective*. National Council of Educational Research and Training.

Problem: The study attempts to define the role and attitude of teachers in bringing out desirable change.

Objectives: (i) To motivate teachers to take initiative in bringing change, (ii) to motivate parents to cooperate with the school, and (iii) to motivate students to learn.

Methodology: The present study was conducted in four phases. In phase one a pilot programme for 38 teachers of 2 schools with 1800 students population was conducted by appointing 1 consultant, 2 school supervisors and 2 social workers. In the second phase field tryout was done on a sample of 167 teachers, 7530 students of 18 schools. In the third phase the programme was launched in the remaining 16 schools of 'S' ward from 1995-96 under their training unit. Finally in the fourth phase multi-media package was developed.

Major Findings: (1) Change in teachers' attitude was the highest achievement. (2) Percentage of low achievers decreased and that of middle achievers increased. (3) Parents were found to be very cooperative. [0790]

KAUR, BALJIT. 1997. **Promoting first graders' literacy skills through improved teaching practices and home-school linkages.** In, *Teacher Empowerment and School Effectiveness at Primary Stage: International Perspective*. National Council of Educational Research and Training.

Problem: The present study aims at promoting first graders' literacy skills through improved teaching practice and home-school linkages.

Objective: To foster better home-school linkages to support children's learning.

Methodology: In all 71 children participated in

the project. Data were generated on children's literacy skills, perceptions of teachers, parents and children, on meanings and functions of literacy, literacy related activities at home and classroom instruction and interactions, through assessment, case studies, observations, home visits, teachers' journals and semi-structured interviews. The collected data were treated with mean, SD and ANCOVA.

Major Findings: (1) Children in all the groups gained in different literacy skills. The DI (Direct Instruction) activities significantly increased decoding skills. (2) Comprehension skills of questioning, predicting and summarising improved markedly in the Reciprocal Teaching (RT) groups. The CG children were better in copying and dictation. An integrated curriculum incorporating activities for increasing decoding speed and accuracy, and teaching comprehension strategies were developed and piloted in kindergarten class in 1995-96 with positive results. [0782]

KHADER, M.A. 1996. **Classroom transaction: Evidences for strategic planning.** In, *Studies on Classroom Processes and School Effectiveness at Primary Stage*. National Council of Educational Research and Training.

Problem: The present study addressed the issues related to the level of classroom transaction and major variables that differentiate the multigrade and non-multigrade schools.

Objective: To identify the level of classroom transaction in multigrade schools.

Methodology: The sample consisted of 10 multigrade and 10 non-multigrade primary schools from rural and urban areas of the DPEP district in Haryana. An observation schedule was used as a tool to collect the data. The collected data were treated with analysis of variance and multivariate analysis.

Major Findings: (1) The level of classroom transaction in multigrade and non-multigrade schools was found low. (2) The study revealed that multigrade groups both in rural and urban areas were weak in providing instruction for learners' achievement. (3) Despite similar level of classroom management, rural non-multigrade

group made effort to provide instruction for learner involvement. (4) Urban non-multigrade schools were found extremely weak in providing instruction for learners' involvement. [0752]

LAKSHMI, K. 1996. **Impact of school readiness programme on primary school children.** In, *Studies on Classroom Processes and School Effectiveness at Primary Stage*. National Council of Educational Research and Training.

Problem: The present study examines effectiveness of the programme in the context of development of psychomotor, language, cognitive and socio-emotional skills facilitating in increasing the enrolment and fall in drop-out rates.

Objectives: (i) To study the effectiveness of the school readiness programme on the child in the context of different developmental areas namely physical, psychomotor, language, cognitive and socio-emotional, and (ii) to assess the impact of the programme on the drop-out rate.

Methodology: The study was conducted on 15 primary schools. The sample included Class I teachers who underwent training programme and Class I children who were exposed to school readiness programme. Tools used included questionnaire, interviews and observation schedules. Collected data were treated with mean, SD, and 't' ratio.

Major Findings: (1) The children who took part in activity-based learning in experimental schools showed significant difference in skills related to language, number and cognitive areas. (2) The attendance of children in experimental schools improved considerably. (3) The difference between control and experimental schools continued up to the final examination even on the experience-based learning technique had not strictly been continued in all schools. (4) Experimental schools with ECE background scored well both in mid-term and final evaluation. (5) Rate of decline in drop-out rate was significantly lower in experimental schools as compared to controlled schools. [0766]

NAGARAJU, C.S. 1995. **Intervention for MLL attainment in multi-grade contexts.** In, *School*

Effectiveness and Learning Achievement at Primary Stage: International Perspective. National Council of Educational Research and Training.

Problem: The present study addresses the issues of minimum level of learning in a rural context.

Objective: To find out the impact of the intervention for MLL attainment through multi-grade package for Standards I and II in mother tongue and mathematics.

Methodology: Total sample of the study comprised 552 children who were selected from 184 rural schools of Tumkur District of Karnataka, by taking at least three students from each school. Tools used to collect the data included a battery of competency based achievement test in Kannada mathematics and EVS. The collected data were analysed using correlation.

Major Findings: (1) Significant shift in the pattern of achievement in their second year students had been observed both in mathematics and language. This was observable only in language in case of their first year at school. (2) In mathematics, the performance of the children of the first year showed a distributional change, but it was not statistically significant. (3) In the case of remaining three comparisons, the gains registered were positive and significant both substantially as well as statistically. [0745]

NARIMAN, SANAYA. 1997. **An ethnographic case study of an effective urban-slum schools.** In, *Teacher Empowerment and School Effectiveness at Primary Stage: International Perspective.* National Council of Educational Research and Training.

Problem: The present study attempts to relate school and community partnership, policy and management issues to teacher empowerment and school effectiveness.

Objective: To make a case study of an effectively run primary school in Delhi.

Methodology: The present study uses qualitative method to study policy issues, teacher empowerment and relates them to school effectiveness. Policy and management decisions

taken over a period of 7 years are noted. Regular in-service teacher training programmes used to enrich and empower staff have been documented. Ethnographic teacher interviews have been made over a period of 6 years to determine teacher autonomy and teacher empowerment in the school. Student attendance and student drop-out rates were used to determine school effectiveness.

Major Findings: (1) School effectiveness was determined by the degree of autonomy given to the head. (2) The nature and type of curricular and co-curricular activities directly made for more effectiveness in schools. [0839]

PANDA, B.N. 1996. **Effect of activity-based teaching-cum-evaluation strategy on child achievement and retention.** In, *Studies on Classroom Processes and School Effectiveness at Primary Stage.* National Council of Educational Research and Training.

Problem: The study attempts to examine the effect of systematic activity-based teaching-cum-evaluation strategy in the present educational set up to measure the learning outcomes and retention of Class I students.

Objectives: (i) To study the effect of systematic activity-based teaching-cum-evaluation strategy on attainment of learning materials in mathematical concept, (ii) to compare the effect of systematic activity-based teaching vs. traditional method on achievement of mathematical concept, and (iii) to find out the effect of systematic activity-based teaching-cum-evaluation strategy on retention of learning materials in mathematical concept.

Methodology: The sample of the study comprised all Grade I students in 1993-94 and 1994-95 sessions from the BPDM school in Bhubaneswar city of Orissa. A five criterion referenced Unit test was used to collect the data. The data were analysed using mean, SD and 't' test.

Major Findings: (1) It was found that the experimental group performed better than the control group in every unit as well as overall performance. (2) Systematic activity-based teaching-cum-evaluation strategy was found a better method as compared to the traditional

method in developing mathematical concepts. (3) Retention of learning materials was better in the experimental group than in the control group. [0764]

PANDA, S.C. 1996. **Effect of competency-based instruction in achieving MLL competencies in Grade IV in Oriya medium schools.** In, *Studies on Classroom Processes and School Effectiveness at Primary Stage*. National Council of Educational Research and Training.

Problem: In the present study an attempt has been made to see the effectiveness of an innovation in an Oriya medium school in the city of Bhubaneswar.

Objectives: (i) To identify the Minimum Level of Learning (MLL) related competencies from the science textbook of Grade IV, prescribed by the Government of Orissa, (ii) to identify higher level of learning (HLL) components from the same textbook, and (iii) to ascertain the effect of competency-based teaching in attaining MLL and HLL by the students.

Methodology: The total sample comprised 68 students. Of these, 32 formed the experimental group and 36 formed the control group. These students were selected from Grade IV Oriya medium school in the city of Bhubaneswar. The tools used to collect the data included Coloured Raven's Progressive Matrices (RPM) and Competency Based Criterion Referenced Test. The collected data were treated with mean, SD and 't' test.

Major Findings: (1) There was remarkable difference in the achievement of both the groups. (2) The competency-based instruction yielded significantly better results than the traditional method of teaching. (3) The experimental group differed significantly from the control group at the post-test stage. (4) On the whole 87.51% in experimental group could score more than 60%, whereas in control group only 27.75% could achieve the same. [0771]

PARANJPE, SANDHYA. 1996. **Reforming classroom instructional practices in small size primary schools: Teachers' perception.** In, *Studies on Classroom Processes and School Effectiveness at Primary Stage*. National Council of

Educational Research and Training.

Problem: The present study assesses teachers' perception of the need for reforms, identify problems faced by teachers in implementing new instructional practices and to delineate suitable intervention strategies for facilitating reform.

Objectives: (i) To assess teachers' perceptions on the need for reforming classroom instructional practices, (ii) to identify problems faced by teachers in implementing new classroom practices, and (iii) to delineate suitable intervention strategies for facilitating reform for classroom instructional practices within small size primary schools.

Methodology: The sample comprised 80 schools having 173 teachers who were selected randomly from four educationally backward districts of Maharashtra. Interview technique was used to gather the relevant information from the participating teachers.

Major Findings: (1) Majority of the teachers did not feel the need for reforming classroom instructional practices due to lack of understanding and clarity, professional and social isolation, threat to quality of working life, poor infrastructural facilities and meagre resources. (2) The major problems faced were lack of skill in handling multigrade and multi-level classes and other related issues. (3) A number of interventions/strategies suggested such as need for school-community reflection continuous dialogue, establishment of teacher peer groups, supply of a basic kit, periodic on site school based training and states' district level support through facilitators and expert guides. [0758]

PRADHAN, N. AND MISTRY, M.V. 1996. **Teaching learning process in schools with consistently good or poor results.** In, *Studies on Classroom Processes and School Effectiveness at Primary Stage*. National Council of Educational Research and Training.

Problem: This study makes an attempt to assess the extent of teaching-learning process in schools and the nature of student-teacher interactions which are responsible for the good or poor results.

Objective: To study the adequacy of infrastructural facilities, method of teaching and nature of student-teaching interactions in good and poor result schools.

Methodology: The study is based on the observation of instructional process in the classrooms of Standards I to V for 20 days in two selected primary schools, under the Baroda Municipal Corporation, one having consistently more than 80% retention rate and more than 90% students passing in Standard V, and the other having consistently less than 20% retention rate and less than 40% students passing in Standard V. Unstructured interviews were conducted with teachers, principals, students, etc., to gather data on student-teacher interaction and factors that contribute to differential results. The data were analysed qualitatively.

Major Findings: (1) Factors contributed to good results included (a) mastery (of teachers) in the subjects, (b) pre-teaching activities, (c) child-centred teaching, and (d) healthy students-teacher, student-student and teacher-teacher interaction. (2) The good result school was located in an area inhabited by educated community. Besides the teachers' ability, willingness and devotion to help children, availability of appropriate infrastructure, facilities in the school and dynamic leadership qualities of the head of the institution were major contributory factors to good results. (3) The poor result school was found lacking in infrastructure facilities and certain other aspects that contributed the other school to become good results school. [0775]

RAJAKUTTY, S. 1995. **The case of Operation Blackboard programme in India.** In, *School Effectiveness and Learning Achievement at Primary Stage: International Perspective*. National Council of Educational Research and Training.

Problem: In the present study an attempt is made to evaluate certain crucial aspects of Operation Blackboard programme's output and effects.

Objective: To study the methodology adopted in the evaluation of certain crucial aspects of

OB programme's outputs, and effects.

Methodology: The sample of the study consisted of 370 schools, was taken from the States of Tamil Nadu, Andhra Pradesh and Madhya Pradesh. Blocks were selected randomly from all three states in proportion to the coverage of OB. In each of the selected Blocks, 10 schools were selected. The tools used to collect the data included Effective Teacher Evaluation (ETE) adopted by Omiuker and Apke, and the scaling procedure of National Institute for Rural Development was also used for qualitative assessment of various parameter and constructing indices. Analysis of the collected data were done through analysis of variance and simple correlations.

Major Findings: (1) Differences existed in quality of teaching-learning material procedures across the regional states and differed quite a bit from specifications. (2) Teachers' knowledge and actual usage index was found to be highly correlated in all the three states. (3) Factors affecting knowledge and usage index showed a significant correlation with knowledge. (4) Training did not seem to influence either knowledge level or usage in general. (5) Retention rates did not show any convincing evidence of improvement after the OB programme was introduced. (6) Wherever PTA and its sustained functioning was present, enrolment and retention rates were better. [0828]

RAO, K. SESIDHARA. 1997. **Adilabad agency experiment in activity method.** In, *Teacher Empowerment and School Effectiveness at Primary Stage: International Perspective*. National Council of Educational Research and Training.

Problem: The intervention based study aims to provide access to primary education by opening schools with surplus teachers and community participation. It also attempts to realise minimum levels of learning through the adoption of activity approach in order to provide quality education.

Objectives: (i) To provide access for primary education by opening schools with surplus teachers and community participation, and (ii) to provide quality education by realising the

minimum levels of learning through the adoption of activity approach.

Methodology: Keeping in view the objectives, it was essential to attend from three angles simultaneously. Keeping these three broad areas, the following programmes were taken up. Under universal access, tribal education survey, opening of schools in schoolless habitations, opening of community schools and supply of minimum educational materials as a package of incentive were undertaken. Under universal attainment, training in MLL, training in activity approach and preparation and supply of instructional modules were undertaken. Under universal participation, the construction of school sheds, constitution of Awal Committee, community services and cooperation of non-governmental organizations were accomplished. With the above the experiment was evaluated.

Major Findings: (1) It was found that teachers were in touch with the syllabus of Classes I and II and were trying to realise the minimum levels of learning through activity method. (2) The modules, charts and the kit materials were used in the teaching-learning process. (3) In teaching mathematics, teachers were using match sticks/pebbles/seeds/stones, etc. (4) Pupils were encouraged to discuss in groups and perform activities. (5) Awal committees were constituted and supplied with cards to watch the attendance of teachers. (6) Outgoing programmes were not organised to cover some of the items in the syllabus of Environmental Studies I, due to lack of facilities in the vicinity. (7) The method attracted not only the pupils but also the parents. (8) The method ensured better pupil participation in the learning process and resulting in improvement of pupils strength. (9) Display of charts and materials in the classroom attracted the pupils. (10) The rate of transfer of pupils from Class I to Class II and Class II to Class III also increased. [0837]

RATH, K.B. AND KUMAR, RAJESH. 1997. **Schooling process and school effectiveness: Implication for teacher empowerment.** In, *Teacher Empowerment and School Effectiveness at Primary Stage: International Perspective*. National Council of Educational Research and Training.

Problem: The present study focuses on the schooling process indicators which influence the students' achievement and implications for teacher empowerment.

Objectives: (i) To identify the effects of schooling process on learning outcome at primary stage, and (ii) to determine the schooling processes which promote equity in the school.

Methodology: The sample constituted 100 schools, 408 teachers, 96 head teachers and 1882 pupils of Grade V from Hissar District of Haryana. Tools used for collecting the data included Pupils, School, Teacher and Head Teacher Schedule, Raven's Coloured Progressive Matrices, Achievement Test in Language and Mathematics, and Meta Cognition Questionnaire. Hierarchical Linear Model was used to analyse the collected data.

Major Findings: (1) All outcome measures varied substantially across the school. (2) Metacognitive awareness of students, family environment and ability of students were significant influencing variables for mathematics and language achievement within the school. (3) Ability of student was found significant in addition to metacognitive awareness and family environment. (4) At school level, the process variables such as pupil perception of the teacher, pupil-inclination to teacher's and head teacher's cooperation to teacher in classroom management appeared as potential indicators for enhancing achievement in mathematics. (5) The language achievement was significantly influenced by pupils' inclination towards teacher, academic activity in classroom and head teacher's concern for students' matter. Students' preference to work in groups and sequential presentation of lesson with understandable language significantly influenced the self-esteem of students. (6) Group feeling among students and head teachers' cooperation to teachers appeared as significant process indicators for developing attribution process of students. [0795]

RAY, J. 1996. **Classroom reorganisation: A challenge for universal retention of females.** In, *Studies on Classroom Processes and School Effectiveness at Primary Stage*. National Council of Educational Research and Training.

Problem: The present study is an attempt to probe into the classroom education and the universal retention of girls at primary level of education.

Objective: To find out how far the method of teaching, use of teaching aids, training level of teachers, and classroom organisation accounts for the retention of girls in primary schools and whether improvement in these could lead to achieve the goal of universalisation of primary education with specific reference to girls.

Methodology: The sample of the present study consisted of 10 primary schools (Classes I-V) from Jagatsinghpur District and five from Khurda District which were randomly selected. All sample schools were co-educational schools. Of the 10 schools, 8 schools were rural and 2 were urban. A questionnaire and a survey schedule were used to collect the data. The collected data were treated statistically using percentages, correlations, apart from simple and multiple regressions.

Major Findings: (1) The number of teachers as per the requirement of the number of classes had not been adequate. (2) Among the six components of educational progress, i.e. learning, teaching, training, use of audio-visual aids, evaluation, and co-curricular activities had been negatively related to drop-out followed by teaching and use of audio-visual aid components. (3) Drop-out rate was negatively correlated with the quality of classroom transaction. [0768].

REDDY, ESWARA V. 1995. **Primary education in the web of poverty culture.** In, *School Effectiveness and Learning Achievement at Primary Stage: International Perspective*. National Council of Educational Research and Training.

Problem: The present study assesses the status of primary education in the web of poverty culture particularly in the context of the non-enrolled and dropout children.

Objective: To probe into and assess the existing physical, social and cultural environment of the home, neighbourhood and communities particularly of non-enrolled children and drop outs.

Methodology: Case studies were conducted in all the five DPEP districts of Andhra Pradesh. In each district two villages were identified for the case study.

Major Findings: (1) The physical and cultural environment of home and neighbourhood of non-enrolled children belonging to the disadvantaged groups were not conducive for education. (2) Parents were neither approached nor motivated and nor persuaded by teachers to send their children to school. (3) Low achievement level of children was major reason for losing faith and interest in schools. (4) Children were unable to attend the school as both the parents had been working and these children were required to attend to the domestic chores and look after siblings. [0735]

SAXENA, VISHWAS.; SHARMA, GAJANAND AND SINGH, YATINDER. 1997. **Interpersonal management in the group - A case study of primary schools of Masuda.** In, *Teacher Empowerment and School Effectiveness at Primary Stage: International Perspective*. National Council of Educational Research and Training.

Problem: The study attempts to highlight the interpersonal management skills to empower the teachers for attaining effective educational standard in primary school.

Objectives: (i) To test the degree of self-management in teachers, (ii) to measure reciprocal interactions and their effects in a school, (iii) to study the effects of increased membership on the job of a teacher, (iv) to define the dimensions of dependence and their impact on the role of a teacher, and (v) to study the effects of increased frequency of interactions in a school.

Methodology: The study was conducted in four phases namely motivation, training follow-up and evaluation. The staff members of the schools selected were non-formally apprised about various aspects of interpersonal management. Instead of a special training in the subject referred it was incorporated in various induction programmes of DIET. One-third staff was trained from each school. Teachers who got trained were again contacted after a few weeks in their respective institutions only and their problems

were solved by the DIET staff. Evaluation was done four weeks after the training and based upon following parameters viz. self management, reciprocal interactions, increased membership and frequency of interactions.

Major Finding: The result clearly indicated that when teachers were trained in Interpersonal Management (IPM) skills, a class taught by them showed remarkably conducive learning environment with increased levels of achievement and thus eventual increase in school effectivity from 10% to 15% approximately. [0840]

SENAPATY, H.K. 1996. **Universalisation of primary education and equity in quality.** In, *Studies on Classroom Processes and School Effectiveness at Primary Stage*, National Council of Educational Research and Training.

Problem: The present study attempts to study the equity in quality in the context of UPE.

Objectives: (i) To investigate whether there is equity in quality of primary education in urban and slum primary education, and (ii) to suggest ways and means of improving the quality in the context of universalization of primary education.

Methodology: The sample comprised 120 children from Class II and 125 from Class IV from seven schools in urban, rural and slum areas of Orissa. Piagetian Tasks and competency based tests were used to collect the data. The collected data were treated with ANOVA and 't' test.

Major Findings: (1) There was no equity in the performance of urban, rural and slum children on both Piagetian tasks and competency-based tests, (2) Urban children were in a more advantageous position as compared to their rural and slum counterparts. (3) Performance in all the three groups was much below the desired level. [0762]

SINGH, SATVIR AND SAXENA, R.R., 1995, **Achievement difference and school effects,** *Indian Educational Review*, Vol. 30(1), 1-20,

Problem: It attempts to study the effects of school related variables on pupil's achievement using the data of Baseline Assessment Studies.

Objectives: (i) To study the variation in achievement in mathematics and language within and between schools, (ii) to study the effects of pupils' background on their mathematics and language achievement, (iii) to study the effects of teacher quality on achievement in mathematics and language across schools, (iv) to study the contribution to mathematics and language achievement between schools by the school resources, (v) to study between schools the variation in mathematics and language achievement after adjusting for student's background and school context, and (vi) to study the association of school academic climate with the pupils' achievement between schools.

Methodology: The sample of the study comprised 23,700 students and 4,879 teachers who were selected from 1,746 schools. They were selected randomly. The data related to pupil, school and teachers were collected through the structured interview schedules, namely school record schedule and teacher schedule. The collected data were treated with mean, SD, regression coefficients and HLM analysis.

Major Findings: (1) There were large differences between boys and girls in their achievement, and these differences varied across schools. However, the variation in these differences was uniformly lower in language than that of mathematics. (2) There were large differences between SC/ST and non-SC/ST students in their achievement. However, in most states these did not vary significantly among schools except for Karnataka and Kerala in language. (3) Mother's as well as father's education and father's occupation had a positive association with pupil's achievement and were mostly consistent across states. (4) The differences between pupils who had repeated one or more grades, and those who had not, were large and statistically significant. These differences, though consistent across states, did not vary significantly among schools. (5) It was found that the teacher qualifications to the achievement across states was not statistically significant; however, the size of contribution was varying across states. (6) The teaching experience was negatively associated with mathematics and language achievement. Further, it was also found that the school mean achievement increased as the years

of experience up to a point (10 years) and then it started decreasing thereafter. The in-service teachers' training was also negatively associated with achievement for mathematics (in Karnataka) and language (in Kerala). (7) Duration of teacher's stay in the present school tended to be positively associated with the pupil's achievement. The pooled association with the language achievement was positive and significant. (8) The factors of educational and physical facilities in schools had positive association with school mean achievement in mathematics. These associations were mostly consistent across states. The number of teacher and pupil-teacher ratio had negative association with achievement. (9) The synthesis of the results of all the eight states showed two factors viz., teacher frequently taking test and providing feedback and teacher assigning home work and correcting had positive and strong association with school means in mathematics and language. The third factor viz., time devoted by pupil for doing the homework indicated a positive contribution in language. The fourth factor, namely, teacher frequently gave arithmetic problems to solve in the class, contributed significantly to the mathematics school mean. The remaining factors, viz. teacher commitment, parental involvement and head teacher as leader had shown positive association in some of the states. [0721]

SRIVASTAVA, GAURI. 1996. **Parents' and teachers' perceptions of gender related issues for improving access, enrolment, retention and achievement of girls at primary stage.** In, *Studies on Classroom Processes and School Effectiveness at Primary Stage*. National Council of Educational Research and Training.

Problem: This study aims at finding out how both parents and teachers together can play a crucial role in encouraging girls' education.

Objective: To examine the viewpoint of parents and teachers on gender and gender related issues

Methodology: Two co-educational schools from South Delhi were selected. From each school ten teachers and ten parents of children studying in the schools, were selected. Data were collected through questionnaires followed by

indepth interviews. The data were processed for qualitative analysis.

Major Findings: (1) Parents of children in both schools and teachers had very positive attitude regarding gender and gender related issues. (2) Teachers did not practise any kind of discrimination between boys and girls, in the teaching/learning process. (3) Teachers expressed the view that textbooks were free from any gender bias. (4) Parental attitudes towards boys and girls were non discriminatory. [0777]

UPADHYAY, G.C.; SETH, KANTA.; KAPOOR, RAJENDRA AND SONI, ROMILA. 1996. **Numeracy and reading readiness levels of entrants to Class I.** In, *Studies on Classroom Processes and School Effectiveness at Primary Stage*. National Council of Educational Research and Training.

Problem: This study makes an attempt to examine relationship between numeracy and reading readiness levels of entrants to Class I.

Objectives: (i) To identify reading readiness and numeracy readiness levels of entrants to Class I, (ii) to identify those components of readiness which need strengthening, (iii) to establish relationship between environmental factors and readiness levels, (iv) to establish relationship between readiness level of entrants to Class I and teacher's rating on child's social maturity, and (v) to provide feedback to curriculum planners and textbook writers.

Methodology: The total sample comprised 297 children, who were selected randomly. Of these 217 children were selected from 27 MCD schools from nine Zones and 80 children were selected from 10 public schools of four Zones of Delhi. Their age ranged from 5-6 years. Tools developed to assess school readiness for reading and numeracy were used. Data on social readiness of the child were also collected through observation of the child. The collected data were analysed using mean, SD, 't' test and multiple regression.

Major Findings: (1) Results indicated that vast majority of children lacked adequate levels of readiness for reading and number work at the time of entry to school. (2) In the area of reading readiness the levels acquired by children, were

with regard to audio-visual association, auditory discrimination and visual perception. (3) With regard to vocabulary, though the achievement of children was comparatively better, but at the same time substantial number of children failed to respond correctly to simple sentence comprehension items and picture identification items. (4) In the area of numeracy readiness, poor performance was shown with regard to sequential thinking, seriation, space concepts and pre-number concepts. Children with pre-school experience had better readiness level. (5) The environmental factors showed great relevance to readiness levels of children. (6) Social maturity and mothers' education have contributed significantly and were found to be significant predictors of reading readiness and numeracy readiness. [0776]

VED PRAKASH AND PANDA, PRANATI. 1996. **Literacy and numeracy attainments of Class II students in DPEP states: A meta analysis.** In, *Studies on Classroom Processes and School Effectiveness at Primary Stage*. National Council of Educational Research and Training.

Problem: The present study is an attempt to study the influence of some demographic factors on learners' achievement in the selected DPEP districts taking into consideration the average performance of the learners at the beginning of the lower primary stage.

Objective: To assess learners' achievement both in language and mathematics and the influence of certain demographic variables like area, gender and category on the performance of learners in DPEP states.

Methodology: The sample of the study comprised 37 DPEP districts located in the States of Assam, Orissa, Maharashtra, Tamil Nadu, Haryana and Madhya Pradesh. The sample also included 1527 schools and 18,356 students studying in Class II. The tools used to collect data included Literacy and Numeracy Test. The collected data were treated statistically using mean, SD and 't' test.

Major Findings: (1) There was a large variation in the average performance of students across the DPEP states. (2) Mean performance of children in language was found better than in mathematics (3) Area and gender did not

influence the mean performance of students in both the subjects. (4) The category of students had some influence on their performance, both, in language and mathematics. [0755]

HIGHER EDUCATION

RAO, SREENIVASA, S. AND RAO, BABU G. 1997. **Differences in achievement-motivation between professional and non-professional college students.** *Journal of Educational Research and Extension*, Vol. 34(2), 6-12.

Problem: The present study intends to observe the differences between professional and non-professional college students as their family background and training methods differ.

Objective: To ensure the significant difference between professional and non-professional college students with regard to their achievement motivation, and also to observe the relation between achievement motivation and academic achievement.

Methodology: The sample of the study consisted of 30 Engineering College students (Professionals) and 30 Arts & Science College Students (Non-professionals) of S.V. University, Tirupati. The tools used to collect the data included Sentence Completion Test of B.N. Mukherjee. The collected data were treated with mean, SD, 't' test and Pearson's product-moment correlation.

Major Findings: (1) Achievement motivation was high among professional college students. (2) There was a positive correlation between achievement-motivation and academic achievement. [0707]

SAHU, SHOBHA LAXMI. 1997. **Ordinal position in relation to adjustment: A comparative study.** *Journal of Educational Research and Extension*, Vol. 34(2), 19-24.

Problem: The study intends to assess adjustment in the first born and the last born college students.

Objectives: (i) To study the differences, if any, between adjustment of the first born and the last

born boys, (ii) to study the differences, if any, between adjustment of the first born and the last born girls, (iii) to study the differences, if any, between adjustment of the first born boys and girls, and (iv) to study the differences, if any, between adjustment of the last born boys and girls.

Methodology: The sample of the study comprised 100 undergraduate subjects drawn from Shyam Lal College of Delhi, who were in the age group of 17-20 years. Out of 100 subjects, 25 were the first born boys, 25 were the first born girls, 25 were the last born boys and 25 were the last born girls. The tools used to collect the data included Adjustment Inventory for College Students (AICS) by A.P.K. Sinha and R.P. Singh and a self-made socio-personal profile. Statistical techniques used for analysis of data were mean, SD and ANOVA.

Major Findings: (1) It was found that there existed significant differences in the area of home adjustment and non-significant differences existed in the area of health, social, emotional, educational and overall adjustment. (2) Significant differences were found in home adjustment between the last born girls and boys, the last born and the first born boys and the last born boys and the first born girls. [0709]

THADIKONDA, NIRMALA JYOTHI. 1993. **Perspectives of university education among students, teachers and administrators of Andhra University, Waltair.** Ph.D., Edu. Andhra Univ. Guide: Dr. V. Krishna Murty.

Problem: This study is related to ten important aspects of university education.

Objectives: (i) To prepare a tool on different aspects of university education in order to understand the perspectives of students, teachers and administrators of Andhra University, (ii) to study the different aspects of university education related to its academic and administrative functions to make the study more comprehensive, (iii) to study the correlation between different aspects of university education based on the responses of the sample, and (iv) to compare the response patterns of students, teachers and administrators on items related to all ten aspects.

Methodology: The sample of the study comprised 301 subjects included students, teachers and administrators of both sexes from arts, science and engineering colleges of Andhra University, Waltair. The tool used to collect data was an opinionnaire. The data were analysed using factor analysis, discriminant analysis and chi-square.

Major Findings: (1) It was observed that university students expressed their views mostly on need-based education. (2) University teachers indicated their views that teachers should update their knowledge and skills. (3) University administrators emphasised on smooth functioning of the system focussing on direct contact with the people, innovative practices, various skills, accountability and responsibility, human relations, restructuring courses and introduction of examination reforms. [0699]

SCIENCE EDUCATION

JADHAO, V.G. AND PARIDA, B.K. 1996. **Teaching of force, work and energy at the lower primary level.** In, *Studies on Classroom Processes and School Effectiveness at Primary Stage.* National Council of Educational Research and Training.

Problem: The present study tries to make the teaching of physics concepts easier and more interesting at the lower primary level.

Objectives: (i) To study the distribution of physics concepts of force, work and energy and related ideas in the environmental studies curriculum at the lower primary level, (ii) to suggest their redistribution with reference to proper development of physics concepts in the child in the long run, and (iii) to suggest transactional strategies to avoid and prevent formation of misconceptions or alternative frameworks in the child in relation to the concept by work force and energy.

Methodology: The methodology consisted of analysis and review of placement and contents of the concepts of force, work and energy in the NCERT textbooks. The already existing treatment of these concepts was also subjected to critical scrutiny so as to avoid formation of misconceptions as well as to match the Piagetian development stages of the child.

Major Findings: (1) The placement and distribution of the concepts of force, work and energy in the textbooks, as a rule, were included in separate chapters, which could be easily recognised as belonging to the discipline of physics. (2) The sequence of force, work and energy was not found uniform across Classes III, IV and V. (3) In teaching of these concepts as delineated in the textbooks, the children were likely to develop misconceptions. [0831]

JAYASREE, K. 1998. **Socialization ability, scientific attitude and attitude towards science in junior college students - A study.** Ph.D., Edu. Nagarjuna Univ. Guide: Dr. M. Syama Sundara Rao.

Problem: It attempts to study the socialization ability, scientific attitude and attitude towards science in junior college students.

Objectives: (i) To identify the trend of distribution of the socialization ability, scientific attitude and attitude towards science, (ii) to study the association among the three traits, and (iii) to identify the influence of the variables viz. sex, residence, medium of learning, class environment, and discipline on the above three traits.

Methodology: The sample of the study comprised 446 students from 29 junior colleges. They were selected randomly. The tools used to collect the data included Socialization Ability Tool, Scientific Attitude Scale and Attitude towards Science Scale. The collected data were treated with chi-square and 't' test.

Major Findings: (1) The distribution of the trait socialization ability was not normal. (2) The trait scientific attitude was not distributed normally. (3) The trait attitude towards science was not distributed normally. (4) There was association between socialization ability and scientific attitude. (5) There was no association between socialization ability and attitude towards science. (6) There was association between scientific attitude and attitude towards science. (7) Socialization ability and scientific attitude were not associated in all the variables except discipline. (8) There was no association between socialization ability and attitude towards science in all the variables. (9) Scientific

attitude and attitude towards science were associated in sub samples of boys, girls, co-education, Telugu medium, non-residential institution and science students. (10) The variables sex, type of institution, medium of learning and class environment, were influencing the trait socialization ability. The girl students showed better socialization ability than boys. The students of non-residential colleges, students of co-educational colleges and students of art discipline showed better socialization ability. (11) None of the variables were found influencing the trait scientific attitudes. (12) The variables type of institution and discipline were influencing the trait attitude towards science. The students of unisex institutions and science students showed better attitude towards science. [0824]

KAUSHAL, ASHOK K. 1997. **Science teaching in large classrooms: A comparative study of the effectiveness in selected primary schools of the National Capital Region.** In, *Teacher Empowerment and School Effectiveness at Primary Stage: International Perspective*. National Council of Educational Research and Training.

Problem: The present study is an attempt to study the management and teaching of science lessons using both narrative and coded information in large classroom of the National Capital Region (NCR).

Objectives: (i) To study the current practices of teaching environmental studies to Class V, and (ii) to study the impact of the interventions on the quality of the performance and achievement level of the students of Class V.

Methodology: The sample was drawn from students studying in Class V of the schools in the National Capital Region. One section from each school was treated as the control group and the other as the experimental group. Tools used included Science Class Observation Schedule (SCOS), Science Lesson Rating Form (SLRF), Work Description Form (WDF) and Observation Schedules developed by the researcher. Collected data were treated with mean, SD and 't' test.

Major Findings: (1) The interventions planned in the form of peer group participative learning

manipulating the science learning material (by students) and brief question answer interlude improved the performance of students on the test. (2) In case of control group, the teachers rated themselves a little higher than the observers owing to ignorance of a suitable teaching methodology in the form of interventions for large classrooms. (3) In case of experimental group, peer group learning, active participation of the students in the classroom activities and manipulation of science materials reflected on the performance of students. [0779]

LALITHA, P.R. AND RAO, N.R. NAGARAJA. 1996. A study of the vocabulary required by Class III students to achieve mastery in EVS II as per the Minimum Levels of Learning (MLLs). In, *Studies on Classroom Processes and School Effectiveness at Primary Stage*. National Council of Educational Research and Training.

Problem: The study attempts to find out whether the vocabulary acquired by the child till Class III is adequate for him/her to comprehend the prescribed text of Class III in EVS II and thereby achieve mastery in EVS II as per the prescribed MLLs.

Objectives: (i) To analyse the EVS II textbooks of Class III and identify the vocabulary required by students to achieve mastery in the subject as per the stipulated MLLs, (ii) to assess the vocabulary levels of students as per MLLs in EVS II, (iii) to find out the correlation between assessed vocabulary levels and achievement in EVS II, and (iv) to study the effectiveness of specially designed activities in helping children acquire the needed vocabulary for achieving mastery in EVS II.

Methodology: The textbooks prescribed for Class III students of DMS both in English and EVS II were analysed by a team of teachers. Tests on English as second language and achievement in EVS II were prepared and administered on these students. Mean, SD, 't' test and correlation were used to analyse the collected data.

Major Findings: (1) A student who possessed a good vocabulary level performed well in EVS II. (2) No significant difference was observed in pre-test, post-test results of students in English,

however, marked improvement was observed in the performance of EVS II. (3) High correlation was found between pre and post-test scores on both English and EVS. (4) Students of Class III did not have adequate exposure to answering questions from test papers which involved simple instructions. [0754]

LALITHA, P.R. AND SHARADA, M. 1997. Empowerment of teachers to overcome hard spots in EVS II using activity-based modules at the primary stage. In, *Teacher Empowerment and School Effectiveness at Primary Stage: International Perspective*. National Council of Educational Research and Training.

Problem: The study aims at developing competency-based, activity-oriented, teaching-learning modules in EVS II for Class III and to empower teachers to develop teaching-learning strategies using locally available resources to transact EVS II in the classroom.

Objectives: (i) To develop and administer a competency-based test in EVS II to students of Class III, (ii) to identify the hardspots in EVS II of students and teachers of Class III, (iii) to develop competency-based, activity-oriented, teaching-learning modules in EVS II for Class III, (iv) to empower teachers to handle hard spots in EVS II using activity-based modules, and (v) to enable teachers to develop teaching-learning strategies using locally available resources to transact EVS II in the Classroom.

Methodology: The sample of the study comprised 35 teachers from rural areas in the selected districts who were identified randomly and a training programme was conducted. A competency-based test and teacher questionnaire were developed using the MLL document as the basis to identify the hard spots of students and teachers in EVS II of Class III. They were administered to students and teachers who were selected randomly in both DPEP and non DPEP districts of Karnataka. Analysis of the data indicated that the hard spots for the students were indeed the hard spots for the teachers.

Major Findings: (1) The hard spots in EVS II for teachers and students were the same. (2) Teachers gained a thorough insight into the

competencies. (3) Teachers became aware of the various innovative teaching-learning strategies. (4) Teachers became aware of how to make use of the resources in their immediate environment to make learning of science joyful. (5) Teachers appreciated that pre-planning, i.e. preparation of teaching aids, activity cards, evaluation questions, quiz items, etc. was necessary. (6) Teachers became aware of the importance of observation through which major parts of EVS II could be taught in the primary school. (7) Teachers acquired the skill of evaluating students continuously during the teaching-learning process. (8) Teachers became competent in preparing competency-based items. (9) Teachers became competent in developing activity-based module on the identified hard spots. (10) The demonstration lessons given by them revealed that they had been enriched and empowered to deal with the hard spots. (11) There was a significant difference between the performance of teachers in the pre-test and post-test. (12) The post-test scores indicated that the teachers had mastered all the competencies identified as hard spots. [0807]

MOHAPATRA, J.K. AND DAS, S. 1996. **Classroom processes leading to connotative relativity: A generative cause of primary level pupil's alternative conceptions.** In, *Studies on Classroom Processes and School Effectiveness at Primary Stage*. National Council of Educational Research and Training.

Problem: It attempts to study connotative relativity as a genesis of manifest alternative conceptions with regard to the words 'living', 'animal' and 'plant' and the study also proposes a number of strategies for modification of the alternative conceptions generated due to connotative relativity.

Objective: To examine connotative relativity as a genesis of manifest alternative conceptions with regards to the words, 'living', 'animal' and 'plant'.

Methodology: The subjects for the study included 222 Grade VI students (age group 11-12 years), 216 Grade VII students (age group 12-13 years) from three schools, and 30 tribal teachers teaching at the primary level. Tools

used included pencil-paper test and personal interview.

Major Findings: (1) The processes generating connotative relativity had been identified and their effect as a genesis of alternative conceptions in the context of the specific concepts, 'living', 'animal' and 'plant' has been demonstrated. (2) In the world of connotations of scientific terms, every child is a virtual stranger sitting in a uniquely defined cognition-tight compartment of his/her connotative relativity. (3) The alternative conceptions generated out of connotative relativity, offered resistance to modification (perhaps) because of its deep rooted reinforcement over years. [0770]

PADHI, J.S. 1996. **Effect of competency-based, activity-centred approach to teaching on attainment of mastery level learning in environmental studies.** In, *Studies on Classroom Processes and School Effectiveness at Primary Stage*. National Council of Educational Research and Training.

Problem: The present study was undertaken to examine the effects of competency-based, activity-centred approach to teaching on attainment of mastery level learning in environmental studies.

Objective: To examine the effect of competency-based, activity-centred approach (CBACA) on attainment of MLLs in EVS and compare it with traditional approach (TA).

Methodology: The experimental study was conducted on a sample of 658 Grade I children of two equally divided intact sessions of Bhubaneswar DM school. The data were collected with the help of two competency-based criterion referenced test (diagnostic type) with parallel forms. The collected data were treated with mean, SD and 't' test.

Major Finding: The study revealed that competency-based, activity-centred approach for environmental studies was more effective than the traditional approach for Grade I children. [0829]

SALIM KUMAR, C. 1994. **The interaction of approaches to studying and achievement-**

motivation on achievement in biology of secondary school pupils. Ph.D., Edu. Univ. of Calicut. Guide: Prof. Kamala S. Pillai.

Problem: This study intends to explore whether the influence of approaches to studying and achievement-motivation on achievement varies for boys and girls with rural and urban background.

Objectives: (i) To study the main effect and interaction effect of approaches to studying and achievement motivation on achievement in biology (total and objective-wise) of secondary school pupils of the total sample, boys and girls, and (ii) to study the main effect and interaction effect of approaches to studying, achievement-motivation, sex and locale on achievement in biology (total and objective-wise) of secondary school pupils.

Methodology: The sample of the study comprised 700 students studying in Class IX of the secondary schools of Kerala State. They were selected through proportionate, stratified sampling techniques. The tools used to collect data were Science Studying Approach Inventory by Pillai, K.S. *et al.*, Scale of Achievement-Motivation and Achievement Test in Biology by Investigator. The collected data were treated with two-way ANOVA, four-way ANOVA, Scheffe's post-hoc test and 't' test.

Major Findings: (1) It was found that variation in achievement in biology was dependent upon the variation in approaches to studying to a certain extent and variation in achievement-motivation only to a low extent. (2) Variation in achievement in biology was not dependent on the combined effect of approaches to studying and achievement-motivation. (3) There was a significant interaction effect of organised/disorganised method of study with achievement-motivation, sex and locale on achievement in biology. [0826]

✓ **SANTHA KUMARI, K.M. 1998. Influence of classroom climate and approaches to studying on achievement in physics of secondary school pupils.** Ph.D., Edu. Univ. of Calicut. Guide: Dr. Kamala S. Pillai.

Problem: The study centred upon the influence

of classroom climate and approaches to studying on achievement in physics of secondary school pupils.

Objectives: (i) To study the main effect of classroom climate and approaches to studying on achievement in physics (total and objective-wise) of secondary school pupils, (ii) to study the interaction effect of classroom climate and approaches to studying on achievement in physics (total and objective-wise) of secondary school pupils, (iii) to estimate the relationship between achievement in physics (total and objective-wise) and each of the independent variables for the total sample, (iv) to find out the best predictors of achievement in physics (total and objective-wise) from the set of variables of classroom climate and approaches to studying, and (v) to conceptualise path models indicating causal relationship among variables and validate them.

Methodology: The sample of the study comprised 900 students studying in Class X of the secondary schools in Thrissur, Palakkadu, Kozhikode and Malappuram Districts of Kerala State. The sample was selected using proportionate stratified sampling techniques by giving representation to sex, locale, instructional efficiency and type of management of schools. The tools used to collect the data included, Scale of Classroom Climate by the investigator and Science Studying Approach Inventory by Pillai, K.S., *et al.*, and Test of Achievement in Physics by the Investigator. The collected data were analysed using mean, ANOVA, Pearson's Product Moment Coefficient of Correlation regression and path analysis.

Major Findings: (1) Significant single effect of classroom climate on achievement was noted covering boys/girls, urban/rural for the total sample in physics—total, evaluation category, comprehension category, synthesis category and analysis category, knowledge category and application category. (2) Significant single effect of approaches to studying on achievement in physics—total, knowledge category and synthesis category was found to exist for the total sample. (3) Interaction effect of classroom climate and approaches to studying on achievement was found to be significant only in synthesis category. (4) The selected predictor

variables viz. organised/disorganised method of study, classroom climate total, deep/surface approaches to studying were capable of predicting achievement in physics total. (5) Two path models were conceptualised using classroom climate approaches to studying and achievement in physics and validated using path analysis. (6) It was found that the independent variables were significantly correlated with achievement in physics. [0813]

SAXENA, A.B. 1996. Lessons from teaching "shadow and eclipses" in a primary school. In, *Studies on Classroom Processes and School Effectiveness at Primary Stage*. National Council of Educational Research and Training.

Problem: It attempts to study the difficulties faced by a teacher to suggest effective teaching method in the classroom.

Objective: To identify the difficulties faced by a teacher and to get first-hand experience to visualise effective teaching method.

Methodology: The study was conducted in a government primary school of Bhopal city. All the students of Class V were included in the sample. The study was conducted to explain the concepts of Shadow and Eclipse. The activity approach was followed using locally available materials.

Major Finding: Difficulties faced by teachers were identified and consequently demonstrations and students' participation were incorporated. Using this approach, the achievement level of students increased substantially. [0830]

MATHEMATICS EDUCATION

KOTHARI, RAMESH CHANDRA. 1997. Minimum levels of learning-based approach in teaching of mathematics. In, *Teacher Empowerment and School Effectiveness at Primary Stage: International Perspective*. National Council of Educational Research and Training.

Problem: The present study discusses the development and tryout of an approach for attainment of minimum level of learning (MLL)

for the unit 'Fraction' in mathematics of Class V.

Objective: To identify and plan various competencies for fraction and to identify item-wise performance and competency-wise performance for different competencies on fraction.

Methodology: The sample comprised 50 pupils studying in Class V were selected from the school run by Municipal Board, Baroda, having low achievement rate in mathematics. Tools used included two tests based on the competencies developed by the researcher, charts and concrete objects followed by practice exercises and group work. The data collected were treated with percentages.

Major Findings: (1) Arranging simple proper fraction in descending order with denominators not exceeding 10 was found to be most difficult. Only 56% of pupils were able to master this competency. Similarly, only 60% of pupils could master the competency "arranging simple proper fractions in ascending order with denominator not exceeding 10". (2) Only 62% of pupils could solve daily life problems based on subtraction. This shows that except one competency all other ten competencies were mastered by the pupils up to the expected level. (3) It was also observed that absence of methodical approach was one of the factors responsible for low achievement in mathematics. (4) It was also observed that pupils did not possess pre-requisites with regard to basics in mathematics, as a result they could not progress well in future and gradually developed negative attitude towards mathematics. [0783]

PAL, G.C.; NATARAJAN, CHITRA AND PRADHAN, H.C. 1996. Structure of content and mathematics difficulties among primary students. In, *Studies on Classroom Processes and School Effectiveness at Primary Stage*. National Council of Educational Research and Training.

Problem: This study attempts to find out the effect of context, content and construct on the acquisition of competencies by primary level students.

Objectives: (i) To study the difficulty levels of various mathematical concepts of Minimum

Levels of Learning and look for possible mismatch between sequential nature and difficulty levels of mathematics concepts, (ii) to find out the differences between rural (tribal) and urban students in the difficulty levels of various mathematical concepts and content items involved within a particular concept, (iii) to examine the relationships between difficulty levels of various mathematical concepts and among various content items of a particular mathematical concept, (iv) to examine the relationships of difficulties in mathematics with the social and psychological factors for various groups, and (v) to analyze the nature and causes of errors on mathematical concepts.

Methodology: The sample of the study comprised 326 students of Grade IV, taken from five rural (tribal) schools in Raigarh and Thane Districts of Maharashtra and one urban school in Mumbai. They were selected through quota sampling method. Mathematics Achievement Test developed by NCERT, Self Concept Scale and a questionnaire were used to collect the data. The collected data were analysed using mean, SD, 't' test and correlation.

Major Findings: (1) Rural students faced more difficulties than their urban counterparts in MLL Curriculum Pattern. (2) Minimum Levels of Learning were achieved in addition, division and geometry. (3) Structure of the content item played an important role in understanding and performance. This was also influenced by the language used. (4) Attitudes towards mathematics and self-concept were significantly related to learning of mathematics. [0761]

PATEL, R.S. 1997. **An investigation into the causes of under achievement in mathematics of Grade VIII pupils having high numerical ability.** *Experiments in Education*, Vol. XXV(12), 238-243.

Problem: In the present study an attempt has been made to study the causes of under achievement in mathematics of pupils studying in Standard VIII.

Objective: To ascertain the causes of under achievement in mathematics of the pupils studying in Standard VIII.

Methodology: A stratified cluster sampling technique was employed for drawing 500 pupils studying in Grade VIII from six Gujarati medium schools located in Gandhinagar. Tools used to collect the data included Group Intelligence Test by Dcsai Bhatt, Pupil's Problem Inventory by J.H. Shah, Self-Analysis Questionnaire by Badami and Badami and the Information Data Sheet by the investigator. Collected data were treated with mean, SD, 't' test and chi-square.

Major Findings: (1) A significant difference was found among the high achievers and the under achievers in the level of intelligence. (2) It was observed that the under achievers had more problems than those of high achievers in all the six areas namely, health, monetary, personal, social, religious cum sex and educational. (3) With regard to parental income, occupation and education, it was found that the socio-economic level of parents had a large impact on the achievement, the lower the socio-economic level, the lower the achievement. (4) Study habits of pupils showed tremendous effect on the achievement, poor study habits made for lower achievement. (5) It was found that long absence from school was an important factor in under achievement. [0703]

SWARNALEKHA, N. 1997. **Teacher empowerment strategies to promote problem-solving ability in mathematics through joyful active learning.** In, *Teacher Empowerment and School Effectiveness at Primary Stage: International Perspective*. National Council of Educational Research and Training.

Problem: The study aims at investigating the inadequacies existing in the students of primary classes in the area of problem-solving ability.

Objectives: (i) To investigate the inadequacies existing in the students of Class II in solving problems in mathematics, (ii) to explore whether language plays any role in comprehending the subject area and if so how to interlink the competencies of mathematics with comprehension skills of language and other non-scholastic area, (iii) to design and field test a series of joyful learning strategies for developing problem solving ability, and (iv) to study the effect of relationships between teacher empowerment and students' performance and its effect on pupil attainment.

Methodology: The sample of study included 200 students of Class II from Bhubaneswar to identify the inadequacies in the area of problem solving ability. Opinion of 30 primary school teachers were taken regarding the implementation of joyful learning strategies framed by interlinking the competencies of mathematics with some language skills and other non-scholastic area specially health education through games outside the classroom. The new strategies developed were tried out on a sample of 35 students of Class II A and the results were compared with that of a controlled group of Class II B of the same school.

Major Findings: (1) Remarkable improvement in the problem-solving area of mathematics was attained by paying attention to the language comprehension skills and other non-scholastic areas. (2) It was found important to frame different activities to develop different skills like comprehension, judgement, analysis, synthesis, critical thinking, problem understanding, finding analogy, checking equivalence in similar situations, etc. which were finally linked with operationalisation of the basic problem-solving skills essential in mathematics. (3) The teacher empowerment contributed much to frame more and more new strategies. (4) The teachers who were given more opportunities to interact and share the experience showed much positive approach towards joyful learning strategies, as compared to their counterparts who showed total negative approach and believed that joyful learning practices were more said than done. [0810]

PHYSICAL AND HEALTH EDUCATION

ANTONY, VARGHESE C. 1998. **A comparative analysis of selected psychological variables of volleyball players at different levels of achievement.** Ph.D., Phy. Edu, Rani Durgavati Vishwavidyalaya. Guide: Dr. Ravindra Kumar Yadav.

Problem: It is an attempt to compare the playing ability and the selected psychological variables of Indian male volleyball players.

Objectives: (i) To compare the psychological

variables of male volleyball players at different levels of achievement, (ii) to assess the selected psychological variables on junior, youth and senior national level players on the basis of their performance, and (iii) to establish the relationship between volleyball playing ability and the selected psychological variables at junior, youth and senior national level players.

Methodology: The sample of the study comprised 180 male volleyball players (60 in each group of senior, youth and junior level) were selected at random from amongst the players who represented their respective state teams in various national championships, viz. Senior National held at Chennai (TN), Youth National held at Burdwan (WB) and Junior National held at Nipani (Karnataka) during the year 1995. The age of the subjects ranged from 16 to 32 years. The tools used to collect data included Eysenck Personality Inventory, Rotter's Locus of Control Scale, Sports Competitive Anxiety Test (SCAT), Kamlesh's Sports Achievement Motivation Test, Singh's Level of Aspiration Test, Raven's Standard Progressive Matrices and Vealy's Sports Self-Confidence Inventory. The collected data were treated with analysis of variance, Scheffe's test of post-hoc comparison and Pearson's Product Moment Correlation.

Major Findings: (1) Locus of control, sports competitive anxiety, level of aspiration, intelligence, trait sports, self confidence and state sports self confidence were found to be significant. (2) Neuroticism, extraversion and sports confidence were found to be insignificant. (3) Playing ability was significantly related to intelligence, trait sports self confidence and state sports self-confidence at senior national level. Only to trait sports self confidence at Youth National level and to trait sports self confidence and state sports self confidence at Junior National level. (4) Trait sports self confidence, locus of control, level of aspiration and sports achievement-motivation contributed significantly to volleyball playing ability at Senior National level. (5) Trait sports self-confidence, locus of control, sports achievement motivation and intelligence contributed significantly at Senior National level. (6) Trait sports self-confidence, extraversion, state sports self-confidence and locus of control contributed significantly at Junior National level. [0823]

DIJANASEKARAN, G. 1998. **Effectiveness of teacher intervention strategy in developing school health programme.** Ph.D., Edu. Alagappa Univ. Guide: Prof. S. Mohan.

Problem: This study addresses the role of teachers and students in developing school health programme in the primary schools.

Objectives: (i) To identify the health status of students in Class IV in rural primary schools, (ii) to identify awareness of students regarding health promotion, (iii) to devise training programme for teachers on health promotion, (iv) to orient the Class IV teachers and students towards health promotion, and (v) to assess the effectiveness of teacher intervention strategy.

Methodology: The sample comprised 10 teachers and 305 students. One community development block was selected randomly. From this block, 2 primary health centres which were used randomly for experimental and control groups. From these two primary health centres, 6 and 4 primary schools for experimental and control groups respectively were selected randomly. Relevant data were collected using two questionnaires. Collected data were treated using mean, SD, 't' test, ANOVA and correlation.

Major Findings: (1) Boys and girls were relatively more underweight as compared to their underheight for their age. They also varied in different nutritional and morbidity problems. (2) There was no significant mean difference among various religions and caste group of students studying in Class IV in both experimental and control schools. (3) There was no significant mean difference in awareness level of students with respect to their father's/ mother's educational level, and occupation and economic status. (4) There was a significant improvement in the level of awareness regarding health promotion of teachers in experimental schools after implementing the teacher intervention strategy. (5) There was a significant improvement at the post-test level among students also in the level of their awareness. (6) There was a significant relationship between teachers' and students' post-assessment scores. [0820]

HUSAIN, MUNIRA M. 1994. **Dietetic management of malnutrition in relation to the**

development of pre-school children. Ph.D., Home Sc. Devi Ahilya Vishwavidyalaya. Guide: Dr.(Mrs.) Kamlesh Sharma.

Problem: It studies the low cost soya-based formula food (WSG) and has been comparatively evaluated with a high cost milk based formula (WM) for its efficacy in curing different manifestations of the protein energy malnutrition.

Objective: To study the comparative impact of wheat and milk (WM) and wheat soyabean and ground nuts (WSG) mixes on physical growth, biochemical status, clinical symptoms, neuromuscular and motor-mental development of the severely malnourished preschool children.

Methodology: The sample comprised 130 sample children who were selected and divided into three groups. Group A — control, remained under observation only (n30), Group — B, kept on WM feeding (n50) and Group — C, kept on WSG mix feeding (n50). Their age ranged from 1-3 years from 20 slums of Indore city. The indigenously formulated mix WM Wheat and Milk in 1:1 proportions and WSG (Wheat Soyabean and Groundnut in 5:3:2 proportions) were prepared by roasting, grinding and mixing of all ingredients. For palatability and energy balance the mixes were supplemented by sugar and ghee, 461 Kcal and 454 Kcal energy and 15.8 gm and 17.60 gm protein at a cost of Rs.5.34 and Rs.1.33 (1993 price rate) were provided by 100 gms of WM and WSG mixes respectively. 200 gm formulas were fed daily to respective groups for 90 days in different recipe forms like Laddoo, Chikki, Kheer, Burfi, Puri, etc. to avoid monotony. All precautionary measures were taken to ensure completion of the course of feeding by all the units of sample throughout the period. Wide range of children's growth and developmental indices were examined before and after stipulated feeding schedule. Mean, SD, paired and unpaired 't' tests, chi-square and McNemar's change test were carried out for treating the data.

Major Findings: (1) As regards the feeding of WM and WSG mixes group increased all anthropometric measurements significantly more than control group. (2) As regards the feeding of WM and WSG mixes group increased blood haemoglobin, serum total proteins and

serum albumin levels significantly more than control group. (3) As regards the clinical symptoms feeding of WM and WSG mixes cured different clinical symptoms of nutrient deficiencies significantly more than control group. (4) As regards the neuromuscular development, feeding of WM and WSG mixes cured neuromuscular losses significantly more than control group. (5) As regards the motor-mental development, feeding of WM and WSG mixes increased motor-mental functions significantly more than among control group. [0700]

KAPOOR, S.S. 1998. Effect of physical conditioning programme on the physical fitness for the factors related to long distance and middle distance runners at university level. Ph.D., Phy. Edu. Kurukshetra Univ. Guide: Prof. K.K. Verma.

Problem: This study was carried out to know and evaluate whether physical conditioning programme has any effect on the physical fitness for the factors related to the long distance runners and middle distance runners at university level.

Objective: To assess the effect of physical conditioning programme on the physical fitness for the factors related to long distance and middle distance runners at university level.

Methodology: In the present study 150 subjects were selected randomly. The age of the subjects ranged from 17-25 years. The experimental group consisted of 100 long and middle distance runners, whereas control group consisted of 50 subjects. The tools used to collect data included Leg Dynamometer, Horizontal Bar, Parallel Bar, Stop Watch, Wooden Block, Whistle, Measuring Steel Tape and Stadiometer. The collected data were treated with analysis of variance and Scheffe's Post Hoc Test.

Major Findings: (1) It was found that there was significant improvement in the variable of speed as a result of twelve weeks of conditioning programme in the experimental group whereas no such significant changes or even slight change were noticed in the case of control group. (2) There was significant improvement in endurance. Leg and arm strength improved

significantly and shoulder flexibility and agility also improved. [0814]

PUSHPA, V. AND SHEELA, K. 1997. Impact of nutrition and health information through mass media. *Indian Journal of Adult Education*, Vol. 58(2), 68-73.

Problem: This is an attempt to explore the accessibility and impact of media to women particularly for health and nutrition information.

Objectives: (i) To identify the media accessible to women in particular for nutrition and health information, and (ii) to determine the knowledge gained and degree of practice among women exposed to media in nutrition and health education.

Methodology: The sample of the study comprised 240 mothers (pregnant, lactating women and mothers having pre-school child) randomly selected of which 120 were selected from villages of Devanahally taluka and 120 were selected from Bangalore city. An objective-based interview scheduled was prepared and used to collect the data. The data were treated with means, test of significance and Pearson's Correlation test.

Major Findings: (1) The study revealed that among the media accessible to rural, 59% of rural respondents were reached by television while in urban it was 81%. Radio and contact with extension worker were more popular in rural than in urban respectively. (2) Print media was accessible to urban group and that might be due to their higher educational level. (3) There existed a positive relationship between women's physiological condition and their media participation. (4) Majority of rural and urban pregnant women had medium media participation. But the percentage of pregnant women having high media participation was more in rural than in urban groups. (5) Among lactating women urban group had medium and high medium participation as compared to rural group. (6) Among mothers having pre-school child had low media participation in rural women than urban women. Medium and high medium participation was observed in majority of urban women than rural women. [0719]

SINGH, M.P. 1996. **A study of the existing conditions of games and sports for the promotion of health programme in the senior secondary schools of Haryana.** Ph.D., Edu. Kurukshetra Univ. Guide: Dr. M S. Chauhan.

Problem: The study focusses on existing conditions of games and sports for the promotion of health programme in the senior secondary schools of Haryana.

Objectives: (i) To find out the existing conditions of games and sports in the schools, (ii) to find out how far heads of the institutions are interested in health and physical education programmes in their schools, (iii) to find out how far the students are conscious about games and sports, (iv) to suggest suitable measures to improve the standards of games and sports in the school, and (v) to find out the main hindrances in organizing the programmes of physical education in the schools.

Methodology: The sample of the study comprised 1012 subjects including heads, physical education teachers and students of Classes XI and XII from eight Districts of Haryana. The data were collected using a questionnaire. The data were analysed using percentages.

Major Findings: (1) Positive aspects of the programmes included that a majority of schools recognised physical education activities as part of academic work, had playgrounds inside the school campus surrounded by walls, separate sports rooms, school participated in inter-school competitions, school awarded prizes to the winners, physical education teachers performed duties other than physical education programmes, other teachers showed interest in physical education programmes, schools allotted separate periods for games and schools held their sports during the school hours. (2) Negative aspects of the programmes included that a majority of schools had inadequate physical education teachers, playgrounds, playground area in proportion to the number of students. Schools did not have gymnasium halls, swimming pools, facility of first aid, and physical education as a subject. School did not organise annual sports and prize distribution function. Insufficient budget, heads of the schools were dissatisfied with the present conditions of games and sports. Physical education teachers were

not satisfied with their position in schools. Schools did not make annual calendar for sports, did not have sports activities during holidays, did not practise yoga and did not celebrate annual sports day. (3) Suitable remedial measures were suggested to improve the standards of games and sports in the schools. [0698]

YEGAMMAL, C. AND NIVARGI, RITA. 1993. **Knowledge, attitude, practices (KAP) of and nutritional status of beneficiaries of ICDS programme in Coimbatore and Hyderabad.** *The Indian Journal of Nutrition and Dietetics*, Vol. 30(3), 61-65.

Problem: This study is an attempt to assess the nutritional knowledge, awareness and attitude of women towards the feeding programme and the effect of this on the nutritional status of children and women.

Objective: To find out the knowledge, awareness and attitude of women towards nutrition programme of ICDS towards feeding and its effect on the nutritional status of children and women.

Methodology: This study was conducted on 200 beneficiaries and 100 non-beneficiaries who were selected randomly from 20 ICDS centres (10 centres from each) of Coimbatore and Hyderabad. The relevant information was collected through interview schedule and by employing standard procedures of anthropometric and clinical examination. The collected data were treated with mean, SD and 't' test.

Major Findings: (1) It was found that the means of almost all the measurements of boys were higher than the girls of the same age. (2) In majority of cases, beneficiaries registered better heights than non-beneficiaries. In both the sexes, mean body weight of beneficiaries were higher than non-beneficiaries except in the age group of 18-24 months (though not significantly). (3) It was found that girls of Coimbatore showed better mean weights than girls of Hyderabad. (4) A significant difference in the age groups of 12 to 18 months and 18 to 24 months was found. (5) The difference between chest and head figures did not show any

significant difference in both the places among beneficiaries and non-beneficiaries (6) In Hyderabad, a majority of women beneficiaries did not go in person to receive the food which naturally affected their knowledge regarding the programme. [0720]

MORAL, ART AND AESTHETIC EDUCATION

CHITALE, NEELIMA J. 1993. **Development of instructional material for adaptive mode of teaching applied art and study their effect.** Ph.D., Edu. *Shreemati Nathibai Damodar Thackersey Women's Univ.* Guide: Dr. Vinaybala Mehta.

Problem: This study addresses the problem of teaching appreciation of visual art, also search of a suitable strategy that would enable one to consider simultaneously the unique nature of the subject which requires exercising the faculty of feeling while attending differential needs of the learners.

Objectives: (i) To analyse the objectives of art-teaching, (ii) to analyse the content of the subject of applied art, and find out most stable part of the content, the part of the content having wide applicability for different areas of specialisation in home science, and the part of the content useful in real life situation, (iii) to frame the syllabus of the subject of applied art suitably for adaptive mode of teaching, (iv) to design and prepare instructional material for teaching the subject of applied art in adaptive mode, (v) to teach the subject of applied art with the help of the prepared instructional material, and (vi) to study the effects of teaching the subject of applied art in adaptive mode.

Methodology: The sample comprised 66 girl students studying in pre-specialisation year of home science degree programme of S.N.D.T. College of Home Science, Pune. CIIPP (context, input, process and product) model of evaluation is followed for studying the effects of using the developed instructional material in adaptive mode of teaching.

Major Findings: (1) Interactive mode of teaching visual art was found feasible in existing formal

educational set-up. (2) Adaptive mode was found to be supportive to teaching visual art to promote visual perceptual sensitivity. (3) Adaptive mode of teaching was found to be time effective. (4) Holistic approach of presenting the content of visual art seemed to have positive effects along all the three dimensions of development, viz. cognitive, conative and affective. (5) Development of visual perceptual sensitivity was a trainable skill. Girl students at the age of 17+ could be trained. (6) Development of visual perceptual sensitivity could be assessed by using the visual perceptual sensitivity test and the scheme of evaluation designed in this programme. (7) The instructional material prepared was directly usable educational product. (8) This study added to knowledge of teaching visual art in visual interactive mode and holistic teaching based on the theories of latent learning. [0821]

EDUCATIONAL TECHNOLOGY

ILANGOVAN, K.N. 1998. **Effectiveness of audio-video intervention in developing listening comprehension in English at higher secondary stage.** Ph.D., Edu. *Bharathiar Univ.* Guide: Dr. N. Balasubramanian.

Problem: It attempts to study the effectiveness of audio-video intervention in developing listening comprehension in English at higher secondary stage.

Objectives: (i) To establish the relative effectiveness among the different instructional strategies, viz. Conventional Teaching Method (CTM), Media-based Non-interactive Group Instruction (MNGI) and AV Presentation as a Support System (SS) in developing listening comprehension in English at higher secondary stage, (ii) to find out whether there is significant difference among the different instructional strategies, viz. CTM, MNGI and AV as a support system (SS) in terms of their effectiveness in modifying the micro-skills which are required for local listening comprehension and global listening comprehension among the higher secondary students, (iii) to develop syllabus-based audio-video materials in developing listening comprehension in English among the students at the higher secondary stage, (iv) to

develop audio-video materials for testing and assessing the performance of the higher secondary students in listening comprehension in English before and after experimentation, (v) to evaluate the developed audio-video materials from technical and pedagogical points of view by experts, educationists and practising teachers of English, (vi) to find out whether there is any significant difference among different instructional strategies, viz. conventional teaching method (CTM), Media-based Non-interactive Group Instruction and AV presentation as support system in their effectiveness in terms of their retention of micro-skills required for local listening comprehension and global listening comprehension, and (vii) to find out whether there is significant difference with regard to students' academic achievement in English before and after experimentation owing to the intervention of AV presentation in developing listening comprehension skills of the higher secondary students.

Methodology: The sample of the study comprised 105 students of Standard XI. These students were divided into three groups, one of the groups was identified as control group and the other two groups were treated as experimental groups. The tools used to collect data were audio/video cassettes and three objective-based paper-pencil tests. The collected data were treated with mean, SD, t-test, ANOVA, ANCOVA and Product moment correlation.

Major Findings: (1) It was found that the three instructional strategies viz. CTM, MNGI and AVPSS were effective in modifying and developing the skills of local and global listening comprehension in English at the higher secondary stage. (2) The CTM, MNGI and AVPSS were more effective in developing all the micro-skills in respect of listening comprehension in English at the higher secondary stage. (3) It was found that the CTM, MNGI and AVPSS were different in their effectiveness while modifying the skills of local and global listening comprehension in English among students. AVPSS was the most effective instructional strategy as compared to others. (4) It was found that CTM, MNGI and AVPSS were more effective as compared to CTM in modifying the different micro-skills of the local and global listening comprehension in English among higher

secondary students. But these were equally effective in modifying the micro-skills such as listening to contextual speech via picture cues and local listening comprehension via audio model. (5) It was found that the MNGI were more effective in comparison to CTM in modifying the micro-skills i.e. listening to lecture and news items both, in audio-mode but they were equally effective in listening to modifying the listening to news item and listening to talk, both in video mode. (6) It was found that the MNGI were more effective when compared to AVPSS in modifying the micro-skills i.e. listening to lectures via audio mode but AVPSS was more effective as compared to MNGI while listening to news item via video mode. (7) AVPSS was found more effective as compared to MNGI and CTM in enhancing the retention of the skill of listening comprehension and local listening comprehension, whereas MNGI was more effective as compared to CTM and AVPSS in enhancing retention of the skill of global listening comprehension among higher secondary students. (8) The MNGI was more effective as compared to CTM in enhancing retention on the skills of local listening comprehension namely the ability to discriminate among the distinctive vowels and consonants, to guess the meaning of the words listened to, to make use of real world knowledge and experience in understanding ideas and the ability to detect key words in English. While CTM was more effective as compared to MNGI on the skill of the ability to fix the related words in their proper contexts. (9) It was found that AVPSS was more effective as compared to MNGI and CTM in enhancing retention of the micro-skills namely the ability to detect attitude of speaker towards subject matter, to identify relationship among units within discourse and the ability to make use of facial, paralinguistic and other clues to arrive at meaning. (10) It was ascertained that the effectiveness of different instructional strategies differed from each other in realizing the instructional objectives in developing the listening skill and enhancing the retention of listening skill in English among higher secondary students. [0701]

TEACHING STRATEGIES

AGARWAL, RAJ RANI. 1997. **A study of the effect**

of teaching strategies in relation to creativity on conceptual learning of Grade XI students of commerce. Ph.D., Edu. Jamia Millia Islamia. Guide: Dr. Aejaz Masih.

Problem: It attempts to study the interactive effects of two major domains — teaching strategies and creativity on learning outcomes and retention of concepts of Grade XI students of commerce.

Objectives: (i) To compare adjusted mean learning scores and adjusted mean retention scores of students belonging to Advance Organizer Model (AOM), Concept Attainment Model (CAM) and the Conventional Method (CM) by taking intelligence and pre-test scores as covariates, and (ii) to study the effect of treatment, creativity and their interaction on conceptual learning and on concept retention of students.

Methodology: The sample of the study comprised 96 students divided into three groups (two experimental and one control group), each group had 32 students of Grade XI of commerce group belonging to three Government Senior Secondary Schools. They were selected using random sampling technique. The tools used to collect data were Standard Progressive Matrices by J.C. Raven, Mehdi's List of Creative Thinking, and Concept Attainment Test developed by the Investigator. The collected data were treated with mean, SD, analysis of covariance, analysis of variance and 't' test.

Major Findings: (1) The Advance Organizer Model (AOM) and the Concept Attainment Model (CAM) were found to be more effective than the Conventional Model (CM) in fostering concept learning. (2) CAM was found more effective than the CM in the measure of concept retention whereas there was no significant difference between the AOM and the CM in the measure of concept retention. (3) AOM and the CAM were significantly different in the measures of concept retention while both were found equally effective in fostering concept learning. (4) The high creative group (HCG) showed better concept learning when taught by AOM and CAM than the CM. (5) All the three teaching strategies when intergroup comparison was done showed a non significant result for the student of low creative group (LCG) pupils. Yet the mean scores on

concept learning outcome for LCG was maximum in CAM followed by LCG pupil's in AOM group and minimum for their counterparts in CM. (6) The mean scores in concept learning outcome for the HCG pupil was found maximum in AOM group followed by a HCG pupils in CAM group and for CM group. [0697]

TEACHER EDUCATION — PRE-SERVICE AND IN-SERVICE

AQARKAR, S.C. AND GAMBHIR, V.G. 1996. **Comprehensive programme to improve classroom interaction in municipal schools of Solapur.** In, *Studies on Classroom Processes and School Effectiveness at Primary Stage.* National Council of Educational Research and Training.

Problem: The present study attempts to study the feasibility of using primary school teachers as resource persons and to develop a need-based teacher training programme in the municipal corporation schools of Solapur in bringing the improvement of classroom interaction processes.

Objectives: (i) To find out the real needs or teacher expectations from teacher training programme, (ii) to design a teacher need-based programme, and (iii) to explore the viability of using primary school teachers as resource persons.

Methodology: The study employed the methodology of empowering teachers by a well designed, purpose-oriented teacher training programme. Specifically developed materials such as laboratory manuals, teachers' handbooks, and handouts were made available to resource persons and the teachers. School visits formed an essential component of the project. Periodic meetings to take stock of the situation were arranged for the resource persons.

Major Findings: (1) The primary teachers could successfully take up the role of resource persons. (2) It took roughly a period of six months to develop the required competence to perform the role of resource persons. (3) Resources of local voluntary and

governmental agencies could be channelised effectively to carry out instructional innovations in the system. [0757]

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- AGARWAL, V.P. AND KAMLESRAO, G. 1997. **The quality of in-service teacher training programmes for primary school teachers — An appraisal study.** In, *Teacher Empowerment and School Effectiveness at Primary Stage: International Perspective*. National Council of Educational Research and Training.

Problem: It attempts to study the quality of in-service training programme in relation to coverage of content and transactional studies and ascertain the extent of transmission loss in teacher training programmes.

Objectives: (i) To study the quality of in-service teacher training programmes in relation to coverage of content and transactional strategies, and (ii) to ascertain the extent of transmission loss in teacher training programmes.

Methodology: Two groups of resource persons training and four groups of teachers trained under Special Orientation Programme for Primary Teachers (SOPT) and District Primary Education Programme (DPEP) projects in the state of U.P. and Haryana were randomly selected. Coverage of content and the mode of transactional strategies were observed using observation schedules.

Major Outcomes: (1) Considerable amount of content was not transacted in the training programmes for resource persons under DPEP and SOPT programmes. (2) Further loss was observed at teachers' level as more content were left out. (3) Emphasis was on transmission of information and knowledge rather than on instructional strategies and activities. (4) Transactions during training were mainly through lectures and discussions. Group work or activities were too less. (5) The loss of information was more in SOPT than in DPEP training programme. (6) DPEP training programme, compared to the SOPT programme provided better quality of training in terms of more coverage, adoption of child-centred activities and less loss of information. [0794]

BABU, R. AND GNANAGURU, A. SELVARAJ. 1997. **Teacher effectiveness and involvement in teaching of commerce at higher secondary level in Tamil Nadu.** *Journal of Educational Research and Extension*, Vol. 34(2), 13-18.

Problem: This study is designed to investigate teacher effectiveness and involvement in teaching of commerce at higher secondary level in Tamil Nadu.

Objectives: (i) To determine the level of teacher effectiveness in teaching commerce and their involvement in teaching, (ii) to compare the level of teacher effectiveness in teaching commerce and their involvement in teaching, (iii) to compare the teacher effectiveness in teaching commerce in respect of their locality, sex and qualifications, and (iv) to determine the degree of relationship between the scores of teacher effectiveness and involvement.

Methodology: The sample of the study comprised 288 commerce teachers (244 male and 44 female) who were selected through multi-stage random sampling technique in five stages from 144 higher secondary schools of Tamil Nadu. The tools used to collect the data included Teachers' Effectiveness Inventory of R. Babu, and Teachers' Involvement Inventory. The collected data were treated with mean, media, SD, 't' test, CR and correlation.

Major Findings: (1) Teacher effectiveness in teaching commerce was found to be good. (2) The traits directly related to teacher effectiveness had more impact upon the effectiveness of teaching in commerce than the traits indirectly related to teacher effectiveness. (3) Sex and locality of the commerce teachers had no effect upon the teacher effectiveness. (4) The commerce teachers with the research degree were found to be more effective in teaching commerce than their counterparts. (5) The involvement of teachers in teaching commerce and their effectiveness of teaching were found to be correlated significantly. [0708]

BHATTACHARJEE, D.K. 1997. **A conceptual model of teachers empowerment at primary level: Contextual issues, emerging paradigms and parameters.** In, *Teacher Empowerment and*

School Effectiveness at Primary Stage: International Perspective. National Council of Educational Research and Training.

Problem: The focus of this study is on teacher empowerment issues at primary level. It attempts to highlight the emerging paradigms of primary education, and identify an agenda for tomorrow's child.

Objectives: (i) To identify the teacher empowerment issues at primary level, (ii) to highlight the emerging paradigms of primary education and implications for teacher empowerment, (iii) to identify agenda for tomorrow's child, (iv) to highlight teacher empowerment strategies derived from empirical research findings on teachers' empowerment issues at primary level, and (v) to develop a conceptual model of teacher empowerment highlighting its parameters.

Methodology: The teacher empowerment issues and empowerment strategies at primary level highlighted in the paper have been derived from Baseline Assessment Studies in various districts of Assam, Madhya Pradesh, Maharashtra and Orissa and findings of empirical studies on training needs of teachers, teacher quality, teacher education curriculum, teacher's role, teacher effectiveness and teacher's motivation at primary stage.

Major Outcomes: The conceptual model of teacher empowerment at primary level will help build capacities in DIETs/CTs/PTTI's/BRC's/CRC's to empower the teacher with modalities/tools/techniques/ designs/guidelines to operationalize the multiple strategies to finally empower the learner, the teaching-learning process, the parents, the learning conditions, the community and to enlarge the canvas of institutional capabilities. [0836]

DAS, PANCHANAN, 1997, **Case Study of National Awardee Teacher — His theory and practice for teacher empowerment and school effectiveness.** In *Teacher Empowerment and School Effectiveness at Primary Stage: International Perspective.* National Council of Educational Research and Training.

Problem: It attempts to study the school

effectiveness of theory and practices used by a National Awardee Teacher.

Objective: To study the background, personality profile and innovative practices used by the case teacher.

Methodology: This case was identified from the list of National Awardee Teachers of Orissa for the year 1995. Mr. B.K. Wain has been working as Headmaster in different primary schools of Cuttack since 1960. In order to collect the data, the investigator developed interview schedules for the case teacher, other teachers of the concerned school, parents and D.I. of the school. The classroom observations, personal and school records were also used for supplementing the data. Descriptive analysis technique was followed for analysis and interpretation of the data.

Major Outcomes: (1) Personality characteristics of the case teacher like regularity, punctuality, sincerity and commitment to the profession had really inspired other teachers, students and parents. (2) Strong will-power, sincerity in purpose, love and affection for others and institutional belongingness were potential factors for success. [0838]

JAIN, V.K. AND ARORA, O.P. 1995. **Effect of school level variables on achievement gap between boys and girls.** *Indian Educational Review*, Vol. 30(1), 26-51.

Problem: It attempts to study the effect of school level variables on achievement gap between boys and girls.

Objective: To explore the achievement gap between boys and girls on mathematics and language and school level factors that are associated with this gap.

Methodology: A sample of the study comprised 1,746 schools from 43 districts of the eight states comprising 4,879 teachers and 23,700 students was drawn using three stage stratified random sampling procedure. Mathematics Test, Language Test, Pupil Schedule, Teacher Schedule and School Schedule were used to collect the data. The collected data were treated with mean, SD, 't' test and Hierarchical Linear Model Analysis.

Major Findings: (1) It was found that achievement gap existed between boys and girls. Further, it showed that the achievement gap increased in both the subjects after controlling the pupil level variable in most of the states and it had negative association with the achievement in case of all states except Kerala. The achievement gap in mathematics was larger than language. (2) It was found that the higher qualification of teachers helped in improving the achievement of students to some extent. However, students, in particular girls, tended to perform higher provided teacher's with graduate and above qualification were not appointed at the primary stage. Further, continuous stay of teachers for not more than five years in the same school was likely to improve performance of girls. (3) Large number of teachers in a school had a negative effect on the achievement of children. (4) The students performed better in the extended primary schools than primary schools. (5) The presence of more than 50% female teachers in a school was likely to improve the performance of girls. It was possible that the girls felt more homely with the presence of female teachers in the school. (6) The frequent assignment of mathematics problems was negatively associated with the achievement gap between boys and girls. Teacher's commitment and leadership of headmaster made a positive impact on the learning achievement of children. [0722]

✓ JANGIRA, N.K.; SINGH, AJIT AND YADAV, S.K. 1995. **Teacher policy, training needs and perceived status of teachers.** *Indian Educational Review*, Vol. 30(1), 113-122.

Problem: This study focuses on the State Government teacher policy covering teacher recruitment procedure, demand and supply of teachers, initial posting, transfer policy and representation of female teachers in the work force.

Objectives: (i) To study the document and analyse state policy on teacher training, their recruitment procedure, transfer policy, demand and supply, initial and in-service training, etc., (ii) to study the document and analyse infrastructural facilities available at the district

level for initial and in-service training, (iii) to study perceptions of teachers about their social, economic and professional status, and (iv) to identify training needs of teachers.

Methodology: The sample of the study comprised 1907 primary school teachers of the two districts in each of the states of Assam, Maharashtra, Karnataka, Kerala, Tamil Nadu, Orissa and five districts of Madhya Pradesh were selected through random selection technique. The tools used to collect the data were, State Policy on Teacher Training Guidelines, Schedule of SCERT Faculty, Schedule of Districts/Block Education Officer, Training Institute Information Schedule and Teacher Schedule. The collected data were treated with percentage.

Major Findings: (1) The recruitment procedure was centralised in some states. (2) Except Haryana and Madhya Pradesh the demand and supply of teachers was seen to be double. (3) There did not exist any common transfer policy in different states. (4) The minimum qualification for the teachers was +2 and matriculation. Teachers felt that the quality of initial training they received was not satisfactory. (5) There was mixed opinion about SES of primary teachers but the women teachers enjoyed a better economic status. (6) Teachers got no support from District Education Officer and they also felt that their promotional prospects were bleak. (7) The school problems faced included multi-grade teaching and high rate of students' absenteeism. [0725]

KHADER, M.A. 1997. **A model for strategic planning of in-service training inputs for teachers.** In, *Teacher Empowerment and School Effectiveness at Primary Stage: International Perspective*. National Council of Educational Research and Training.

Problem: The study attempts to question the prevailing tendency of the trainers and teachers to rely on conventional approaches in performing professional roles and exhorts them to move out of their comfort zone.

Objective: To outline a model for using strategic planning approach in choosing training inputs in the in-service training programmes for teachers.

Methodology: The model is formulated based on the evidence emerging from the analyses of field reality and available research studies. By critically examining the field reality in terms of the prevailing patterns of training, entry level qualification, duration size of teachers, pupil-teacher ratio, multigrade and non-multigrade system of schools. The paper points out the need for adopting planning approach in designing training inputs.

Major Findings: (1) There are evidences to the effect that systematic planning of training inputs — pedagogy and management strategies — facilitates teachers to perform their professional roles effectively. It means planning of training inputs did make a difference. (2) Indicators provided the framework for planning training inputs by facilitating the selection of training inputs, developing materials, executing training and verifying whether they make any difference. Obviously, indicators provided a framework for formulating a data based model in training by integrating development, training and research. [0788]

KULKARNI, V.G. 1997. **An investigation into the classroom management behaviours of teachers and its implications for the teacher training.** Ph.D., Edu. Shivaji Univ. Guide: Dr. Anant N. Joshi.

Problem: This study addresses the problem of classroom management behaviours of teachers with reference to the students' overt and covert behaviour. Apart from it, this study also centred upon the problem of classroom management during teaching.

Objectives: (i) To identify factor structure of teaching behaviour in special context of classroom management, (ii) to study the classroom behaviour of teachers having effective and ineffective classroom management, (iii) to identify factors facilitating and hindering classroom management behaviours of teachers, and (iv) to enlist components of classroom management skill and draw implications of the same for teacher training.

Methodology: The sample of the study comprised 840 students and 168 teachers of the higher secondary stage from Kolhapur city. The

students were selected randomly. The tools used to collect data were Classroom Teaching and Managerial Behaviour Analysis Battery (CTMBAB) by the researcher in Marathi, Teacher Behaviour Scale, Students Overt Behaviour Scale and Student Covert Behaviour Scale. The collected data were treated using factor analysis.

Major Findings: (1) It was found that the various factors served purely instructional function were (a) General Lecturing Competency (GLC) covering questioning for feedback, closure, blackboard work, reacting, teacher's interacting personality, mastery over plan and content, (b) teacher's solicitation and reacting, (c) the linguistic competency deficiency, (d) the strict content building tendency, (e) teacher's mastery over plan and content, and (d) modulating gestures and speech. (2) It was found that the various factors served purely managerial functions were: (a) general classroom management competency, (b) instructive momentum, (c) controlled smoothness, and (d) teacher's status maintenance. (3) It was found that the various factors served both managerial and instructional were: (a) GLC covering, set, induction, explaining and stimulus variation (b) B.B. work for organised pacing, (c) socioemotional permissiveness, (d) timely use of nonverbal media, (e) teacher's purposive physical movement and (d) teaching flow management deficiency. [0728]

LAKSHMI NARAYANA, U. 1997. **Impact of in-service training on teacher empowerment with special reference to professional skills of primary teachers.** In, *Teacher Empowerment and School Effectiveness at Primary Stage: International Perspective.* National Council of Educational Research and Training.

Problem: In the present study an attempt is made to know the impact of Andhra Pradesh Primary Education Project (APPEP) training on teacher empowerment with special reference to professional skills of primary teachers.

Objectives: (i) To identify essential professional skills for teacher empowerment, (ii) to develop professional skill scale (PSS) and observation checklist for measuring professional skills of primary teachers, (iii) to identify professional

skills of resource persons and teachers, (iv) to find out the discrepancy of professional skills between resource persons and teachers, and (v) to find out the differences of professional skills between APPEP trained and untrained teachers.

Methodology: The sample of the study consisted of 200 teachers drawn randomly from five coastal districts of Andhra Pradesh. Forty-six resource persons, 115 APPEP trained teachers and 39 teachers not trained under APPEP were also included in the sample. Tools used to collect the data included Professional Skills Scale and Observation Check-list. The collected data were treated with 't' value.

Major Findings: (1) It was found that resource persons and trained teachers did not differ in the professional skills such as, questioning, story telling, using different cards, investigating and experimentation using real objects, working with different cards, making models, recording individual work, group work, whole class work, identifying student potential, assigning tasks based on student potential, involving all students in teaching-learning activity, formation of heterogeneous groups, using local environment and display of teaching-learning material. (2) It was found that there was a significant difference between resource persons and trained teachers in respect of skill of, comparison, observing and generating ideas through questioning. (3) Classroom observation results showed that there was significant difference between trained and untrained teachers in the skills such as questioning, story telling, using different cards, investigating and experimentation, using real objects, working with different cards, making models, recording, individual work, group work, whole classwork, identifying student potential, assigning tasks based on student potential involving all students in teaching-learning activity, formation of heterogeneous groups, using local environment and display of teaching learning material. (4) It was found that trained and untrained teachers did not differ in the skills of comparison, observing and generating ideas through questioning. Trained teachers, due to lack of proper inputs during in-service training did not differ in these skills from their counterparts without training. (5) It was revealed that in-

service teacher training helped many teachers in acquiring seventeen professional skills out of twenty skills. But in-service training did not empower primary teachers in these professional skills, viz. comparison, observing and generating ideas through questioning. [0803]

LALNUNMAWII, H. 1997. **A study of teacher's attitude towards contemporary socio-political issues involving ethnic and regional variables.** Ph.D., Edu. *Jamia Millia Islamia*. Guide: Dr. S. Usmani.

Problem: The present study makes an indepth analysis of teacher's attitude towards contemporary socio-political issues involving ethnic and regional variables.

Objectives: (i) To identify the contemporary socio-political issues, and (ii) to study the state of consciousness within the university teachers and their reactions (attitude) towards the various contemporary socio-political issues like population, terrorism, religion in politics and communalism.

Methodology: The sample of the study comprised 300 teachers from different universities. A questionnaire was used as a tool for collection of data. The collected data were treated with chi-square and Spearman rank order coefficient of correlation.

Major Findings: (1) The university teachers identified the four major contemporary socio-political issues such as religion in politics, population, terrorism and communalism. (2) It was found that the teachers from various universities held the same opinion that religion should not be a part of politics because religion was an individual issue which was personal and it might differ from person to person. (3) The teachers perceived that the religiously orthodox people, political parties and religious leaders had been the major causes for favouring religion in politics. They favoured use of various religious institutions for religious purposes and nothing else. (4) There were no differences in the attitudes of male and female teachers towards the perception of religion in politics, major causes and remedial measures in combating the rise of religion in politics. (5) University teachers emphasized the importance of population

education, they agreed to the use of contraceptives, introduction of population education at school/college level as discipline and rewards for family planners and promoters had been the major steps to curb the problem of population explosion. (6) There were no differences in the attitude of male and female university teachers towards the major causes of population explosion and remedial measures in curbing the population explosion. (7) The teachers from various universities held a similar view point that terrorism was used for violence, killing and intimidation. They emphasized that public in general should oppose terrorist's activities and discriminate and disregard them in terms of social, economic and political spheres. (8) There were no differences in the attitude of male and female university teachers towards the perception of terrorism, major causes of terrorism and possible steps to combat terrorism. (9) It was found that the university teachers held the same opinion that communalism was a hindrance in the way of social development. They expressed the need for teaching the students about the danger of communalism in schools, institutions of higher standard/colleges, etc. (10) There were no differences in the attitude of male and female university teachers towards the perception of communalism, major cause of communalism and remedial measures in combating communalism. [0729]

MISHRA, JUGAL KISHORE. 1997. **Teacher empowerment issues related to development of local specific competencies based curriculum at primary level.** In, *Teacher Empowerment and School Effectiveness at Primary Stage: International Perspective*. National Council of Educational Research and Training.

Problem: It attempts to study the effect of module to empower the primary school teacher in developing local specific competencies based curriculum.

Objectives: (i) To assess the training need of primary school teachers in Environmental Science I. (ii) to know the impact of training module in EVS I based on local specific MLL based curriculum development. (iii) to judge the competencies of teachers in the application of

MLL based curriculum, after the administration of the module, and (iv) to know the school effectiveness through learning achievements after the application of MLL based strategies.

Methodology: Fifty two primary school teachers from three Blocks and one Municipality under Jeypore Education District constituted the sample of the study. Tools used included a module, worksheet and an observation schedule. The collected data were treated with percentages.

Major Findings: (1) Prior to the implementation of MLL based curriculum it was highly essential to orient the primary school teachers to know how to develop local specific competencies based different activities. (2) There was a positive impact of module to empower primary school teachers in developing competency based local specific curriculum. (3) There was appreciable empowerment of primary school teachers to enhance the achievement level of students in EVS I after the orientation. [0804]

MOHAPATRA, J.K. 1997. **Identification of intervention areas for improving teaching — A step towards teacher empowerment.** In, *Teacher Empowerment and School Effectiveness at Primary Stage: International Perspective*. National Council of Educational Research and Training.

Problem: It attempts to identify intervention areas to empower teachers in making them better teachers through their need assessment.

Objectives: (i) To develop a diagnostic tool for identifying the intervention areas for improving teaching efficiency of EVS-II, and (ii) to administer the tool on the primary teachers and specify the intervention areas in the global common core format and subject-specific format.

Methodology: The sample comprised 131 teachers drawn from 51 schools located in urban, rural and under-privileged sectors of the society. A diagnostic tool was developed to collect the data.

Major Findings: (1) Around 70% of the teachers were non-matriculate and around the same number had not undergone at least a C.T.

course. (2) About 97% of the teachers did not have science background. About 64% of the teachers did not attend any orientation/training programme within the last five years. (3) 60% of the teachers did not know anything about MLL. (4) Around 51% of the teachers had not undergone SOPT training with special reference to child-centred, activity-based, joyful teaching-learning structure. (5) About 70% of the teachers did not know how to set a diagnostic test item and had not seen the science kit. [0802]

PANDEY, LATA. 1997. **An integrated approach for transaction of elementary school curriculum through self-organised exhibition by pupils — A model for teacher empowerment.** In, *Teacher Empowerment and School Effectiveness at Primary Stage: International Perspective*. National Council of Educational Research and Training.

Problem: It attempts to study the effect of self-organised exhibition of elementary school pupils on their accomplishment in learning situation.

Objective: To create learning materials for transacting curriculum and acquire competencies as listed in MLLs and to enhance confidence and create a sense of achievement and appreciation among learners.

Methodology: A sample comprised 35 students studying in Class IVB were selected from Demonstration School, Mysore, during a period of four months, i.e. from November 1996-February 1997.

Major Outcomes: (1) Learners were found deeply involved in the preparation of material/task assigned. (2) All learners showed progress and interest in all subjects. (3) Self-prepared material made learning easy and permanent. (4) The praise and appreciation of parents and visitors added to the confidence of the learners. (5) Discipline was easier when learners were involved in creative activities. (6) Group/team work was imbibed by learners. (7) Learners acquired the sense of dignity of labour. (8) Learners acquired the sense and skill of using waste materials. [0784]

PARANJPE, SANDHYA. 1997. **Developing partnership for teacher empowerment: A**

focus on INSET. In, *Teacher Empowerment and School Effectiveness at Primary Stage: International Perspective*. National Council of Educational Research and Training.

Problem: The study attempts to examine the present status and need for developing partnership as a mechanism for promoting primary education, particularly in rural areas with specific focus on INSET.

Objectives: (i) To examine the present status and use of partnerships in INSET programmes, (ii) to assess teachers' perceptions on the need for partnership development in INSET, and (iii) to identify partnership pattern for improving INSET and its application in primary schools.

Methodology: The study was conducted in four randomly selected rural blocks from four educationally backward districts of Maharashtra. Within each of the blocks a list of primary schools was drawn up. From each of the four lists 20 schools were randomly selected. The total sample comprised 80 schools and 200 teachers. Tool used to collect the data included interview. The collected data were analysed qualitatively.

Major Findings: (1) Most of the INSET programmes did not use partnerships as a strategy for promoting education and training of primary school teachers, either as a part of the overall training strategy or specific INSET programmes. (2) Teachers strongly expressed the need to establish and promote different kinds of partnerships particularly tripartite between the community (Panchayat, VECs) parents, business/factory owners, and other organizations at different levels in the district. For the realization of INSET inputs a support system of teacher peer groups along with an expert facilitation/guide, was categorically emphasized as necessary basic prerequisites, both crucial mechanisms for achieving continuity and applicability of new INSET practices. INSET needed to be viewed as a continuous ongoing activity and not a one time input. [0796]

PUSHPANADHAM, K. 1997. **Discovering teacher potential through the capacity building programme: An experiment in primary education.** In, *Teacher Empowerment and*

School Effectiveness at Primary Stage: International Perspective. National Council of Educational Research and Training.

Problem: In the present study an attempt has been made to discover the teacher potential through the participative research programme named as Capacity Building Programme.

Objectives: (i) To identify teachers' potential in organising the educational activities in primary schools, (ii) to foster teacher potential, skills through teacher initiated programme, (iii) to find out the difficulties faced by the primary school teachers in teaching different school subjects, (iv) to study the effectiveness of the programme, and (v) to train the teachers on pedagogic skills through the teacher initiated programme.

Methodology: The sample consisted of 60 primary school teachers (36 female and 24 male teachers) having five years' teaching experience were selected from the rural areas of Baroda district. The data were collected with the help of participatory observation and questionnaire. The collected data were analysed qualitatively.

Major Findings: (1) It was found that the primary school teachers having various skills and talents which were useful for educational activities made learning more joyful. The specific talents of the primary school teachers were story telling, singing, preparing low cost and creative teaching aids, writing humorous poems, basic content mastering in primary school subjects and public speaking/communication. (2) Sensitising teachers in social issues was found to be effective to boost teacher's professional commitments. (3) Teachers participation in the capacity building programme was maximum. Teacher initiated programmes were found interesting and appropriate in-service training programme for primary school teachers. (4) Teachers showed interest in participatory programme. (5) Teachers found difficulty in teaching mathematics and science. (6) Recognition and appreciation were found to be the most effective motivational factors for the teachers. (7) Teachers opined that the teacher initiated in-service programmes were interesting and useful to the teachers as they were need-based. [0778]

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RAMA, R. 1997. **A study of the impact of 'burnout' on teacher efficiency and school effectiveness.** In, *Teacher Empowerment and School Effectiveness at Primary Stage: International Perspective.* National Council of Educational Research and Training.

Problem: It attempts to study the impact of burnout on teacher efficiency and school effectiveness.

Objectives: (i) To identify the intensity of burnout among teachers, and (ii) to find out the relationship of burnout with teacher efficiency and school effectiveness.

Methodology: The sample comprised 120 primary school teachers (60 male and 60 female) working in primary schools of Vizianagaram District, who were selected randomly from four types of management schools, viz. Panchayat Raj, Government Aided and Missionary schools. Tools used to collect the data included Maslach's Burnout Inventory (MBI). Collected data were treated with mean, SD, CR and coefficient of correlations.

Major Findings: (1) Female teachers were more burnout than male teachers in primary schools. (2) Urban teachers were more burnout than their rural counterparts. (3) Teachers working in Missionary schools were more prone to burnout than teachers working in aided schools, Government schools and schools managed by Panchayat Raj at primary stage. (4) More qualified and more experienced teachers were less burnout than their counterparts. (5) Among the three aspects of burnout, depersonalization, emotional exhaustion and personal accomplishment influenced burnout in preferential orders. [0785]

RAO, DIGUMARTI BHASKARA. 1997. **Self-evaluation of lessons by prospective teachers.** *Journal of Educational Research and Extension*, Vol. 34(2), 1-5.

Problem: This study intends to identify the effectiveness of student teaching through self-evaluation.

Objectives: (i) To identify the effectiveness of student teaching through self-evaluation, (ii) to identify the merits and limitations of student

Problem: It attempts to study the effectiveness of tribal teachers working in single teacher schools in tribal areas in Andhra Pradesh.

Objective: To examine the effectiveness of tribal teachers working in single teacher schools covering the aspects of teacher absenteeism, quality of teaching-learning and teacher community interaction.

Methodology: The paper is based on a large empirical study conducted in East Godavari and Khammam districts in Andhra Pradesh on a sample of 325 and 166 single teacher schools in both the districts respectively.

Major Findings: (1) The study revealed that teachers' reluctance to stay in the same village where they worked varied due to lack of accommodation, want of basic amenities, co-operation of villagers and wanting to educate their own children in English medium schools/convents in nearby small towns. (2) Some reasons for absenteeism stated were teaching in small schools was not interesting, lack of interest among parents-children, lack of progress amongst students, lack of frequent visits by education officials isolation, family compulsions, health problems, villagers' non-co-operation and problems created by the Sarpanch and others. (3) Teachers' absenteeism is inter-related with not residing in the same village. (4) Teacher-pupil ratio was 1:32 in East Godavari and 1:40 in Khammam. (5) Almost all the single teacher schools had no school buildings. (6) The common teaching aid available in 73% schools was the blackboard but in majority of the schools it was in an unusable condition. (7) None of the schools were covered under the OB scheme. (8) Very few schools had teaching aids. (9) Few schools had an annual plan or time table. (10) Teachers did not realize the importance of lesson plans, time-table and advance preparation for effective teaching. (11) The teacher usually did not discuss anything with students and teachers what was in the textbooks. Students seldom participated in the teaching-learning process tribal teachers found it difficult to read and pronounce the lessons in the regional language (Telugu) correctly. Teachers expressed the need for handbooks with tribal glossary for developing students' vocabulary. Not even 40% of the

children could identify all the alphabets at one stretch. (12) Tribal teachers were not found to be an effective link with the community. Teachers' interaction with the villagers was complex, depending upon their social background, nativity, political affiliation and rapport with the village Sarpanch. [0739]

VENKATAIAH, N. 1997. **Impact of inputs provided in District Institutes of Education and Training (DIETs) on teaching competency.** In, *Teacher Empowerment and School Effectiveness at Primary Stage: International Perspective.* National Council of Educational Research and Training.

Problem: An attempt is made to study the impact of inputs provided in elementary teacher education institutions on the teaching competency.

Objective: To study the impact of inputs such as adequacy of staff, student personal services, academic and auxiliary facilities, co-curricular activities and practice teaching provided in DIETs on teaching competency of student-teachers.

Methodology: A sample of 600 student-teachers from six DIETs in A.P. was drawn following multistage stratified random sampling. The data gathering tools were Teaching Competency Scale and a questionnaire. The collected data were treated with mean, SD, 't' test and ANOVA.

Major Findings: (1) Student teachers belonging to DIETs with partially adequate staff were superior in their teaching competency compared to their counterparts in DIETs with inadequate staff. (2) Individual guidance in subject knowledge improvement and tutorial system had significantly influenced the teaching competency of student-teachers. (3) More the academic facilities provided in DIETs, the higher was the teaching competency of student-teachers. [0797]

VERMA, PUSHPA AND CHABRA, S. 1996. **Application of pedagogical knowledge and skills acquired in teacher training to school teaching by primary school teachers of mathematics.** In, *Studies on Classroom*

Processes and School Effectiveness at Primary Stage. National Council of Educational Research and Training.

Problem: The study attempts to assess teachers' perceptions on the need to reform existing classroom instructional practices in small size primary schools, problems faced in doing so and ways to resolve them.

Objectives: (i) To find out the extent of familiarity with the skills, strategies and devices during the pre-service teacher training and the extent to which teachers are able to employ the training competencies in their classroom practices, and (ii) to enquire into the difficulties and limitations of teachers in using their pedagogical skills and competencies in actual teaching of mathematics.

Methodology: The sample of the study comprised 100 primary school teachers teaching mathematics. Schools were selected on the basis of representative sampling keeping in view both rural and urban zones. Questionnaire and interview were used for the data collection. The collected data were treated qualitatively.

Major Findings: (1) Teachers had sufficient knowledge of subject matter and they did make an initial preparation for the course in advance. (2) Teachers tended to use predominantly one or two teaching techniques namely, illustrations and problem skills. (3) Most of the home work given by the teachers originated from the assigned textbook and was checked by teachers. (4) Majority of the teachers were found having higher professional qualifications than required, which led to the difficulties of handling all subjects by a single teacher. [0759]

VOCATIONAL AND TECHNICAL EDUCATION

SHARMA, R. 1998. **Education and modernization: A comparative study of professional undergraduate and postgraduate students of Maharshi Dayanand University, Rohtak.** Ph.D., Soc. Maharshi Dayanand Univ. Guide: Dr. U.K. Awasthi.

Problem: This study tries to assess the effect of

type of professional education on students' modernity.

Objectives: (i) To examine the effect of professional education on students' modernity, (ii) to ascertain the effect of levels (I Year, II year, III year) i.e. undergraduate and postgraduates of professional education on students' modernity, and (iii) to assess the effect of type of professional education on students' modernity.

Methodology: The sample of the study comprised 300 students of undergraduates and postgraduates from three faculties, viz. medical, engineering and law of Maharshi Dayanand University, Rohtak. They were selected through random sampling technique. The tools used to collect the data were Sharma's Attitudinal Modernity Scale and an interview schedule. The collected data were treated with chi-square.

Major Findings: (1) It was found that level of education had positive association with level of modernity. (2) Postgraduates were more modern than undergraduates. (3) There was significant faculty difference with respect to modernity. The result showed positive association between given faculty order viz. medical, engineering and law and level of modernity. [0819]

SPECIAL EDUCATION

AHUJA, ANUPAM. 1996. **Moving towards inclusive education : An innovative teacher training experiment.** In, *Studies on Classroom Processes and School Effectiveness at Primary Stage.* National Council of Educational Research and Training.

Problem: It is an innovative teacher training experiment which focuses on various issues related to inclusive education.

Objectives: (i) To conceptualise teacher development design for meeting educational needs of all children in the classroom, (ii) to study the extent of the changed classroom practice on the learning and achievement, and (iii) to study the effect of the changed classroom practice on the learning and achievement of the learners.

Methodology: The project was a developmental action research study. The whole school approach was used employing single group pre-test post-test design. Teaching training was based on the Indian adaptation of the UNESCO Resource Pack using activity training approaches. Evaluation of the study was done through the use of specifically designed tools. They included Teacher Attitude towards Teaching and Learning, Pupil Participation in Learning, Teaching Inventory, Classroom Drawing (teachers and children), Learning Preference Questionnaire apart from audio and video tapes.

Major Outcomes: (1) It was found that teacher educators and heads of schools could be trained and motivated for action research to change classroom practice. (2) The training design developed training capabilities of the action research coordinators to train pre-service and in-service teachers. (3) The significant difference between pre-test and post-test mean scores indicated change of attitude of teachers to learning and teaching. (4) The procedures for understanding the needs of in-service and pre-service teachers during training, was transferred to use in the classroom to understand pupil learning style and needs. (5) The pre-test feedback from children's classroom drawings resulted in the change of classroom organisation. (6) The significant difference between pre-test and post-test mean scores indicated change in attitude of students towards learning. (7) A significant outcome was the self-learning by the head and teachers to improve classroom and school practice without external intervention. (8) The action research project particularly in institutions where whole school approach was followed increased interaction among teachers and collaborative work. (9) Working on the Action Research Project to improve classroom practice helped to institutionalise active learning approach as evidenced from: (a) the expressed willingness to continue working with additional modules on effective classroom practices; (b) the desire to extend this approach to more schools through the action research funds of the DIETS; and (c) willingness of teacher training institutions to use these approaches in in-service and pre-service training approaches. [0832]

ASHA, C.B. 1997. **Creativity of hearing impaired and normal children.** *Disabilities and Impairments*, Vol. 11(2), 81-85.

Problem: The present investigation attempts to study creativity of the hearing impaired and normal children.

Objectives: (i) To study whether hearing impaired children differ from normal children in creativity, and (ii) to examine whether hearing impaired and normal children differ in fluency, flexibility and originality aspects of creativity.

Methodology: The sample consisted of 36 children (18 boys and 18 girls) from a Government school near the Calicut University Campus and 33 children (16 boys and 17 girls) from the Institute for the Hearing Impaired at Calicut. The tool used to collect the data included Tests of Creative Design and Elaboration by Asha, which included two sub-tests, i.e. Object Designing Test and Construction Elaboration Test. The collected data were treated with mean, SD and 't' test.

Major Findings: (1) It was found that normal and hearing impaired children differed significantly in creativity. Normal children were found more creative than hearing impaired children. (2) No significant difference was observed between the normal and hearing impaired children in fluency. However, in flexibility the two groups of children seemed to differ significantly. Normal children were found to have larger scores in flexibility. (3) The same trend was observed with respect to originality also. Normal children had a higher mean score in originality than the other group. [0714]

CHAKRAVARTI, K.K.; MISHRA, K.N. AND PANDA, B.N. 1997. **Minimum required areas of training for empowerment of teachers and support facilities needed for their effective functioning at the primary level.** In, *Teacher Empowerment and School Effectiveness at Primary Stage: International Perspective*. National Council of Educational Research and Training.

Problem: The study attempts to identify the minimum support facilities, both physical and

academic required in schools so that teachers are professionally motivated and empowered to transact teaching-learning in classroom properly and effectively.

Objective: To identify the minimum support facilities needed in schools including the process of empowerment of primary school teachers for an effective MLL achievement by each primary school student.

Methodology: The sample of the study consisted of 13 Class II and 134 Class III students of the 15 DPEP project schools of Dhenkanal District of Orissa. Tools used included general information schedule, diagnostic tools, interview schedule and competency based achievement tests.

Major Findings: (1) It was found that 59% of teachers had academic qualifications up to matric and rest 41% had qualifications beyond matric. But all the teachers were professionally trained. 87% and 13% of them had CT/ET and B.Ed. diplomas respectively. (2) 47% of the schools were multigrade for teaching purposes as the class teacher ratio for them was clearly greater than 1. 51% of schools were technically non-multigrade though practically they remained multigrade for a major academic session as teachers were employed by the government frequently to conduct surveys in the catchment areas of the school. (3) It was found that the rural students of Class I had achieved mastery level MLL competencies in language (mother tongue) except in functional grammar and self-learning. But the urban students could not even achieve the same standard. In case of mathematics both rural and urban students could not achieve the required MLL competency. (4) Both rural and urban students of Class II could not acquire mastery level in all competencies of language, mathematics and environmental studies. The achievement level of SC and ST students, as usual, were found to be lower than that of general category in respect of most of the competencies. (5) It was found that majority of the students of Classes I and II had not achieved the prescribed subject-wise MLL and that the general achievement was far below the expected level. (6) It was found that teachers were not even provided with a place, a desk and a chair where they could prepare their daily lessons and activities for classroom

teaching-learning transactions. There was no provision for a cupboard or an almirah for each teacher for safe keeping of textbooks, reference books etc. and students' copy books. Most of the schools had syllabi of each class and of each subject. (7) It was found that all the schools maintained good discipline, decorum in assembly and enforce punctuality and regular attendance of both students and teachers. But classroom teaching-learning through activities were absent in most of the schools and very few planned to attempt them in future. (8) It was found that most of the teachers themselves were demanding training in each of the areas, namely, content, its associated methodology, activity based teaching and techniques of evaluation to empower them to be very effective in classroom teaching-learning transactions and to be competent professional as teachers in schools. [0801]

CHUGHITAI, I.B. 1997. **A study of learning deficient children in Hindi language.** In, *Teacher Empowerment and School Effectiveness at Primary Stage: International Perspective.* National Council of Educational Research and Training.

Problem: It attempts to examine the nature of learning disabilities in Hindi language at the end of Grade II and to evolve preventive strategies.

Objectives: (i) To study the nature of learning disabilities (LDs) in Hindi language at the end of Grade II, and (ii) to evolve strategies to prevent LDs to occur in Hindi language.

Methodology: Some primary teachers from urban and rural schools of Sehore Block were oriented in the areas of learning disabilities and training how to use check-list for the identification of LDs in their respective classes. A list of hundred children studying in Grade III along with their present problems was received from the oriented teachers. Further exclusionary process and differential diagnosis were used to select 20 LD children for the study of LDs in Hindi language. A diagnostic test was used to collect information regarding nature of problems in Hindi language.

Major Findings: (1) Almost all the children of the sample irrespective of their locale and gender

displayed deficit in the component of Hindi language (as a whole). Written language (reading and writing) emerged as the major areas of deficit. (2) Listening comprehension was found better than reading comprehension. (3) In most of the cases overall performance on semantics did not show any deficit but when subcomponents of semantics were analysed separately it was found that most of the children showed deficit in the area of synonyms. In the same way when subcomponents of syntax were analysed separately, some children showed deficit in person, tense and question forming. (4) The areas where LD children showed deficit were related with semantics and syntax (oral language) reading and writing (written language). (5) During testing of LD children following observations were made: (a) poor attendance of identified LD children; (b) lack of the even minimum facilities in the schools; (c) lack of awareness among teachers about LD; and (d) dialect interference effect. [0792].

GOEL, SUSHEEL KUMAR. 1997. **Remedial strategies for children with learning difficulties in mathematics of Classes I and II: Implications for teacher training.** In, *Teacher Empowerment and School Effectiveness at Primary Stage: International Perspective*. National Council of Educational Research and Training.

Problem: The present study tries to identify various learning problems related to arithmetic difficulties and compare the performance of children in rural and urban schools of Orissa.

Objectives: (i) To identify the various task levels and primary descriptors for each level, (ii) to identify various learning problems related to arithmetic difficulties, (iii) to identify the types of arithmetic errors and specific patterns, (iv) to construct a test to effectively assess specific arithmetic skills, (v) to design appropriate remedial teaching technique, (vi) to compare the performance of children in rural schools and urban schools, and (vii) to conduct an orientation programme for teachers to disseminate findings of research and acquaint them with remedial measures.

Methodology: The sample of the study consisted of 300 children of Standards I and II in rural

and urban multigrade schools, who had poor academic achievement in maths, and their IQ ranged from 90 to 120. Tools used included the test booklets, and apart from this a wide variety of concrete aids in the form of coloured beads, blocks, marbles, rods, discs, number boards, abacus, measurement devices, cards and charts, geometric shapes, coins and currency notes, and model clock were used. Collected data were treated with mean, SD, 't' test and correlation.

Major Findings: (1) The performance of students at R level was far better than their performance at A level for all the four groups. (2) The performance of students at CR level was far better than their performance for the corresponding items at R level in all the four cases. Use of concrete materials provided them an opportunity to explore new ideas, find ways of solving problems and mathematical relationships. The sense of accomplishment helped to sustain the interest of the child in mathematics. (3) The performance of students at CA level was far better than their performance for the corresponding items at A level in all the four cases. Children showed improvement if provided sufficient interactive and concrete experiences necessary for development of basic arithmetical concepts were given to them. (4) The performance of students at (CR+CA) level was far better than their performance for the corresponding items at (R+A) levels in all the four cases. (5) While comparing the data between Rural Oriya Medium Schools (ROMS1) and Urban Oriya Medium Schools (UOMS1), no significant difference was found at any level. (6) While comparing the data between ROMS1 and UOMS2, no significant difference was found at any level except at CA level and CR+CA level. (7) The item analysis showed that (i) the percentage scores at CR level were much higher than those at R level, (ii) the percentage scores at CA level were much higher than those at A level, (iii) the percentage scores at R level were much higher than those at A level for all the items and in all the four cases. (8) The following learning problems were identified related to arithmetic difficulties: (i) memory problems, (ii) reading problems, (iii) language problems, (iv) cardinality problems, (v) symbol confusion, (vi) inability to group sets, (vii) ordinality problems, (viii) symbol association problems,

(ix) lack of the concept of place values, (x) inability to subtract, (xi) lack of mastery of computation skills, etc. (9) Significant reduction in errors revealed that concrete materials were effective means to develop mathematical concepts and skills. [0800]

GUPTA, S.K. 1997. **Study of the incidence and nature of learning disabilities at the end of Class II in language and arithmetic and to evolve preventive strategies.** In, *Teacher Empowerment and School Effectiveness at Primary Stage: International Perspective*, National Council of Educational Research and Training.

Problem: The study attempts to investigate the incidence rate of children with learning disabilities, develop diagnostic tests and study the nature of such learning disabilities in Hindi and arithmetic.

Objectives: (i) To find out the incidence rate of children with learning disabilities in the school of Sehore Block under DPEP District Sehore, M.P., (ii) to explore the procedure to identify and assess the children with learning disabilities, (iii) to develop diagnostic test in Hindi language to study the nature of learning disabilities, (iv) to develop diagnostic test to study the nature of learning disabilities in arithmetic, (v) to study the nature of learning disabilities in Hindi and arithmetic, and (vi) to evaluate strategies to enhance the competencies of regular classroom teachers to prevent learning disabilities to occur at Classes I and II.

Methodology: The sample for the study included 20 learning disabled children each in Hindi and arithmetic. These children were subjected to medical assessment and psychological tests, and diagnostic tests. The data were analysed using descriptive and inferential statistics.

Major Findings: (1) The incidence of learning disabled children of Grade III was found to be 7.4% covering 4% boys and 3.4% girls. (2) Almost all children displayed deficit in Hindi especially in written language, oral reading and recognition of words, sentences and two digit numbers. (3) Listening comprehension was found better than reading comprehension, (4) Factual listening comprehension was better than

inferential listening comprehension. (5) Understanding and use of spoken language was found better than written language. However, potential dialect interference effect on various components of language was observed. (6) In arithmetic, learning disabled children showed deficiency in basic operations. None of the children irrespective of locale and gender could reach the mastery level of 80%. Their achievement in terms of MLL was found to be 50/50 only. [0798]

PRAKASH, SUJENDRA, B.S. 1998. **Psychological correlates of extraocular colour vision.** Ph.D., Psy. Bangalore Univ. Guide: Prof. M.S. Thimmappa.

Problem: It attempts to explore the possibility of the skin to identify colour distally especially for the blind, who have no other way of distinguishing colour.

Objectives: (i) To devise a measuring instrument and technique to quantify Extraocular colour vision (EOCV), (ii) to correlate some of the background, personal and psychological variables with EOCV, (iii) to analyze the effect of certain background variables on EOCV, (iv) to adopt and refine the measurement of Haptic sensitivity and Spatio-motor ability and (v) to analyze the variability among the blind in relation to EOCV.

Methodology: The sample comprised total of 64 subjects — 16 totally blind, 16 partially sighted, and 32 sighted — were drawn equally from the male and female population. Apart from the general idea of the nature of the study, none of the subjects had any prior knowledge of the tests being conducted. Tools used included EOCV Box with bibscreen and sleeves attached, Blindfold, Two coloured Blocks, one blue and one red, EOCV response sheet, Form Board with ten blocks and bibscreen attached, Mirror-drawing apparatus with stylus and metal screen, Ishihara Colour Blindness Test, General Questionnaire, Coan's Experience Inventory, Sharma's Handedness Inventory, Taylor's Manifest Anxiety Scale, Stopwatch, Bell, and Writing Materials. The collected data were treated using mean, SD, 't' test, Hotelling's T2, ANOVA, Correlation multiple regression analysis and canonical discriminant function analysis.

Major Findings: (1) The fingertips of the left hand of the blindfolded subjects were capable of identifying the colour and its absence, which irritated the skin at a distance of about 4 cm. significantly higher than chance performance on an average. (2) Blue colour is considerably easier to identify and learn extraocularly than red. (3) Practice improved EOCV performance significantly though individual differences existed in terms of benefiting from the feedback. (4) The totally blind were able to learn to identify all the three stimuli as against the sighted and the partially sighted who were able to learn and identify only the colours. (5) Psychological variables could predict EOCV significantly better than background and personal variables. (6) Previous visual experience tended to be negatively related to EOCV performance. (7) Low and high scorers on EOCV differed significantly in terms of social participation, handedness, haptic sensitivity, and unusual perceptions and associations. (8) Working mother as a background variable in addition to psychological variables like deliberate and systematic thought, unusual perceptions and associations, i.e. spatio-motor ability, and handedness were capable of collectively predicting EOCV performance. (9) A total of 18 variables — 6 background, 5 personal, and 7 psychological — acted as predictors of low and high EOCV performance. (10) The process of extraocular sensory experience and the association of several factors contributed to a model of EOCV. [0833]

PUNANI, BHUSIAN. 1997. **Comparative evaluation of the effectiveness of various modes of education of visually impaired children.** *Disabilities and Impairments*, Vol. 11(2), 86-102.

Problem: This study documents the comparative effectiveness of different modes of education of the visually impaired with respect to a number of predetermined objectives.

Objective: To conduct a systematic comparative and evaluative study of the effectiveness of different modes of education on the visually impaired.

Methodology: The sample comprised 130 visually impaired children, of these 50 children were from integrated education, 26 were from semi-integrated education and 54 from

residential schools. Their age ranged between 10 to 15 years, who were studying in Classes IV, V and VI. The tools used to collect the data included Tooze Braille Speed Test, Vineland Social Maturity Scale, and Mani's Test of Concept Development. The collected data were treated with mean, median, SD, chi-square, two-tailed 'T' test and Tuckey's test.

Major Findings: (1) Integrated education was found much more effective than residential education. (2) It was established that there was no difference in the coverage of congenitally blind children in the three modes of education. (3) The semi-integrated education was found most effective in enrolling the children who had already availed ophthalmic intervention followed by residential education and integrated education. (4) Integrated education emerged the most effective in attracting children from farming community, farm labourers and families engaged in crafts. (5) A significant difference between integrated education and semi-integrated education as well as between integrated and residential education was found in respect of promoting social integration among students. The semi-integrated education emerged the most effective and integrated education the least effective in this respect. (6) Integrated education failed to enhance social integration of the visually impaired children. Even in respect of social maturity, it has no inbuilt advantage over other modes of education. (7) Its quality on education in terms of speed and accuracy of braille is comparatively inferior. [0715]

RUKMINI, B. 1997. **Psychological problems of children with learning difficulties: An investigation into an effective intervention in Indian setting.** Ph.D., Psy. Osmania Univ. Guide: Dr. K. Ramachandra Reddy.

Problem: This study deals with the problems of children with learning disabilities, with special reference to dyslexia, its relation to I.Q. and personality.

Objectives: (i) To identify learning disabilities among children and compare them with non-learning disabled children in the intelligence, visual motor perception, self-concept, locus of control, and achievement motivation, (ii) to

identify a specific learning disability (spelling, (dyslexia)) and provide an appropriate intervention for the learning disabled children, and (iii) to study the effect of intervention on their performance.

Methodology: The sample of the study comprised 30 learning disabled male and female children and 30 non-learning disabled children. Based on the score on pupil rating scale, learning disabled and non-learning disabled were selected. Their age ranged between 11-12 years. The tools used to collect the data included a Pupil Rating Scale by Myklebust, Intelligence Scale for Children of Malins, Locus of Control, Intellectual Achievement Responsibility Scale by Crandall, Crandall and Katkovsky, Self Concept Scale by Saraswat, Achievement Motivation Scale by Mohan, and Bender Gestalt Test by Dwivedi. The collected data were treated with mean, SD and 't' ratio.

Major Findings: (1) There existed a significant difference between the learning disabled and non-learning disabled on the intelligence full scale score. (2) The non-learning disabled obtained a higher mean in the verbal and non-verbal test scores than the learning disabled. (3) The score on the self-concept scale, locus of control and achievement motivation did not reveal a significant difference between the learning disabled and non-learning disabled. [0693]

SRIVASTAVA, G.N. PRAKASH. 1997. **Study of teacher training components and their effectiveness in DPEP.** In, *Teacher Empowerment and School Effectiveness at Primary Stage: International Perspective.* National Council of Educational Research and Training.

Problem: It attempts to study the teacher training components and their effectiveness in DPEP districts of Madhya Pradesh and Maharashtra.

Objectives: (i) To identify and analyse DPEP teacher training components of MP and Maharashtra, (ii) to study the feasibility of these components for the fulfilment of DPEP objectives, (iii) to study the effectiveness of these training programmes, (iv) to sort out problems faced in the implementation of the training

inputs, and (v) to provide suggestions for improvement in the programmes.

Methodology: The sample of the study consisted of 137 teachers, (59 parents and VEC members), and 400 students drawn from 76 schools (60 schools in MP and 16 schools in MS) covering 7 districts of M.P. and 3 districts of Maharashtra. The tools used to collect data included DPEP teacher training evaluation questionnaire, interview schedule for parents and VEC members, student and school observation schedule and DPEP training materials developed in M.P. and M.S. The data collected were scored and frequencies on each item were recorded.

Major Findings: (1) It was observed that due to a number of teacher training packages used in Madhya Pradesh Shikshak Samkhya Approach Based training, Sekhana Sikhana, Dakshata-Shikshan, SOPT, etc., teachers were confused regarding the methodology to integrate and assimilate all these training packages. (2) At some places lack of physical facilities had also been responsible for ineffectiveness of these training programmes. (3) The positive aspect of these training packages had been that most of the teachers could understand child-centred orientation, use of teaching aids and activities in teaching, school community relationship, school learning climate, motivation, role of VEC and importance of cocurricular activities, etc. As far as academic achievement of children is concerned there was no satisfactory improvement. (4) DPEP teacher training and orientation at state level was not of sufficient duration in Maharashtra. (5) Sufficient insight could not be developed in the MLL approach of teaching and evaluation. The positive aspect was that sufficient attention was paid to school cleanliness and decoration, cooperation and missionary zeal provided by VEC and other community members for the improvement of education. (6) Researcher also gave few state specific suggestions. [0799]

DISTANCE EDUCATION

ANIL KUMAR, K. 1998. **An investigation into the distance learners' academic self-concept, study habits and attitude towards distance education in relation to academic**

performance at first degree level. Ph.D., Edu. Ch. Charan Singh Univ. Guide: Dr. (Mrs.) S.K. Singh.

Problem: The present study attempts to explore academic self-concept, study habits and attitude towards distance education in relation to academic performance at first degree level into the Indian Open University Distance Learners.

Objectives: (i) To assess the background characteristics of the first degree level distance learners of Delhi and adjoining areas, (ii) to explore the patterns of academic self-concept, study habits and attitudes towards distance education among distance learners of Delhi and adjoining areas, (iii) to study the significance of differences in the academic self-concepts of first degree level distance learners differing in certain background variables, (iv) to examine significance of differences in the study habits of first degree level distance learners vis-a-vis their background, (v) to compare the attitude of first degree level distance learners towards distance education in various subgroups based on background variables, (vi) to study the relationship of academic self-concept with academic performance of distance learners at first degree level, (vii) to investigate into the association of academic performance with study habits practised by distance learners at first degree level. (viii) to examine the extent of dependence between academic performance and attitudes of distance learners towards distance education at first degree level, (ix) to predict academic performance of first degree level distance learners on the basis of their academic self-concept, study habits and attitude towards distance education, and (x) to study the relative contribution of the predictor variables (Objective ix) towards variance in the criterion viz., academic performance of distance learners at first degree level.

Methodology: The sample of the study comprised 318 distance learners of the IGNOU Regional Centre, Delhi. The tools used to collect the data included Academic Self-concept Scale by the researcher, Study Habits Inventory by S.K. Jain, Attitude Scale by the researcher, a Personal Information Sheet and a Master Sheet. The collected data were treated with percentage, mean, SD, 't' test, correlation and multiple regression analysis.

Major Findings: (1) With regard to the background characteristics of distance learners a majority was enrolled for bachelor's degree in 1991 and a majority of them was male and was in the age group of 25 years and above, belonged to urban and were employed. (2) The first degree level distance learners possessed average academic self-concept, exhibited good study habits, and held positive and favourable attitude towards distance education. (3) The first degree level distance learners belonging to two academic streams and two employment status group differed significantly on their academic self-concept. (4) On study-habits the first degree level distance learners differed significantly with respect to five background variables. (5) Academic performance was found to be significantly related to academic self-concept, study-habits and their attitude towards distance education. (6) Around 22% variance was accounted for the prediction of academic performance by three predictor variables. They were academic self-concept, study habits and attitude towards distance education. [0827]

ADULT, CONTINUING AND NON-FORMAL EDUCATION

KAUR, JASRAJ. 1997. **TV viewing behaviour of illiterate and neo-literate adults of Punjab and their perceptions about the impact of TV programmes on their socio-cultural life.** Ph.D., Edu. Punjabi Univ. Guide: Prof. Amrit Kaur.

Problem: This study assesses the TV viewing behaviour and perceived impact of TV programmes on the socio-cultural life of illiterate and neo-literate adults of Punjab.

Objectives: (i) To compare the TV viewing behaviour of rural illiterate and neo-literate adults, (ii) to compare the perceived impact of television programmes on the socio-cultural life of adults, and (iii) to find out the perceptions about the impact of television programme on the socio-cultural life of adults in relation to their viewing time.

Methodology: The sample of the study comprised 400 rural adults of Punjab which included 200 illiterate and 200 neo-literates who were selected

randomly from the two districts of Punjab, i.e. Faridkot and Hoshiarpur. Socio-Economic Status Scale and questionnaires were used as tools to collect the data. The data were treated with chi-square.

Major Findings: (1) Neo-literates viewed TV for longer duration than illiterates. (2) The most preferred day of viewing TV for both illiterates and neo-literates was Thursday. (3) Neo-literates were more responsive than illiterates to the questions asked in the TV programmes. (4) The illiterates utilised the knowledge gained through TV in personal life whereas the neo-literates applied that knowledge for doing social service. (5) More illiterates than neo-literate adults felt that because of viewing TV programmes they had become more socially mobile. (6) More neo-literate than illiterate adults thought that TV viewing had made them less inclined towards untouchability, activated them for doing social service, had started giving equal status to persons of different religions, prompted them toward gender equality, made them less superstitious, improved their life style, prompted them to raise the age of marriage of their daughters, made them non-interfering in the life of others, prompted them to give equal status to persons belonging to different castes, made them appreciative of different cultural groups and made them self independent. (7) No significant difference was found between illiterate and neo-literate adults pertaining to social maturity. (8) More illiterates than neo-literates perceived a negative impact of TV on their respect for elders, frequency of visits to relatives, mode of celebration of national days, observance of undesirable cultural traditions, meal times, time spent at home, religious belief and fulfilment of social responsibilities. (9) More neo-literate than illiterate adults felt that TV programmes negatively influenced their mode of celebrations of religious days, interaction with family members, mode of celebrations of festivals and interaction with neighbours. (10) No statistically significant difference was found between illiterate and neo-literate adults regarding the negative impact on attendance at social gatherings. [0818]

KAUR, PUSHPINDER AND KAUR, AMRIT. 1997. **Motivation of rural female adults to**

participate in the adult education programme — personal, economic, social, political and educational factors. *Indian Journal of Adult Education*, Vol. 58(2), 42-49.

Problem: It attempts to study the role of personal, economic, social political and educational factors that play in the motivation of rural female adults to participate in the adult education programme.

Objective: To explore the personal, economic, social, political and educational factors of motivation in relation to age among rural female adults.

Methodology: The sample of the study comprised 500 rural female adults who were participating in the adult education programme being conducted by Chandigarh Literacy Council under the Total Literacy Campaign. Their age ranged from 16 to 45 years. A questionnaire for rural female adults was designed to collect the data. The collected data were treated with percentage.

Major Findings: (1) It was found that the personal, social, economic, political as well as educational factors which motivated rural female adults were related to the age of the learners. (2) The effect of age on motivation was more prominent in the case of economic, social, political and educational factors than the personal factors. [0718]

NANDA, RENU. 1997. **A study of non-formal education programme in the Jammu Division.** Ph.D., Edu. *Univ. of Jammu*. Guide: Prof. G. Rasool.

Problem: This study addresses the problems of non-formal education in Jammu Division of J&K State.

Objectives: (i) To have a complete picture of the prevailing position of non-formal education programmes in Jammu Division with special reference to enrolment, number of centres, infrastructure, role of instructors, supervisors, etc., (ii) to identify the factors which create hindrances in the promotion of non-formal education programmes in Jammu Division, (iii) to identify the factors which are helpful in promoting non-formal education programme, and (iv) to have a comparative study of academic

achievement of students of formal and non-formal sectors of education.

Methodology: The sample of the study comprised 30 supervisors, 200 instructors, 300 parents, 400 students of non-formal education and 500 students of formal education, who were randomly selected for the study. The tools used to collect the data included questionnaires, interview schedules and question papers. The collected data were analysed using frequencies, percentages, critical ratio and chi-square.

Major Findings: (1) As regards the facilities, instructors, teachers and parents viewed that the main hindrances in promoting the non-formal education programme in the State were less salary, lack of proper training and improper teaching material, shortage of good school buildings, lack of playgrounds and other facilities to run cultural programmes. (2) The reasons for the drop-outs, by and large, were the same as denoted by the supervisors, instructors and parents. But early marriage of the girls, non-availability of the study material, etc. were also some of the reasons for the drop-outs of the students from the non-formal education system. (3) The parents viewed that the NFE centres were located close to their houses. (4) The researcher suggested that in order to promote NFE programme the training programme of instructors should be strengthened, inspection and supervision of the centres should be done at regular intervals and village level agencies should be involved actively. (5) As regards retention and enrolment of the students, instructors, supervisors and parents were of the opinion that provision of game materials and teaching materials should be made available to them. The activities of launching awareness drive among the students and parents and introduction of vocational training to the instructors should be conducted from time to time. At the same time salary of the instructors should also be increased. (6) It was found that the boys were given more importance than the girls in education. (7) The curriculum was found to be similar for non-formal education and formal education students. (8) Supervisors, instructors and parents conceived that there were no special incentives for girls, no provision for mid-day meals, remedial coaching, free books,

scholarships and residential schools for non-formal education students. (9) The academic achievement of non-formal education students was found better than formal education students. [0822]

SARADA, D. 1997. **Family life education for adolescent girls through non-formal adult education programme.** Ph.D., Home Sc. Sri Padmavati Mahila Visvavidyalayam. Guide: Prof. K. Chandralekha.

Problem: It attempts to study the effect of Family Life Education (FLE) programme on adolescent girls through non-formal adult education programme.

Objectives: (i) To identify the FLE needs of adolescent learners of NAEP as perceived by the learners themselves; married adult women and the subject experts, (ii) to assess the factors causing differential perceptions about FLE needs of adolescent learners by married adult women, experts and unmarried adolescent girls, (iii) to assess the impact of age, family income, caste, type of family, size of the family and marital status on FLE need perception of unmarried adolescent learners of NAEP, (iv) to examine the adequacy and relevance of FLE content in the NAEP instructional material, (v) to develop a model FLE curriculum for unmarried adolescent girls, and (vi) to evaluate the effectiveness of model FLE curriculum for adolescent girls.

Methodology: The sample comprised 500 subjects covering 100 married women and 100 unmarried adolescent girls, who were drawn using multistage random sampling technique. The tools used included, FLE Needs Identification Scale, General Information Schedule, FLE curriculum, FLE programme and Evaluation Schedule. The collected data were treated using mean, SD, 't' test and chi-square.

Major Findings: (1) All the groups perceived the need for FLE and identified the content area for inclusion in FLE curriculum. (2) A majority of the respondents felt the need for publication and distribution of FLE information in the form of a book. Further, development of a FLE curriculum in the form of a manual, to impart FLE through NAEP — a nation wide programme covering

adolescents and adults was found to be highly suitable channel for introducing FLE. (3) Age, family income, caste and type of family were not significantly associated with perception of FLE needs by married women but these independent variables were associated with perception of FLE needs of unmarried adolescent girls for few topics. [0816]

SHARMA, S.P. AND GUPTA, V.P. 1997. **Study of working and out-of-school children in the age group 6-14 years in Bhopal City with a view to develop motivational strategies to enhance enrolment in schools.** In, *Teacher Empowerment and School Effectiveness at Primary Stage: International Perspective*. National Council of Educational Research and Training.

Problem: The present study intends to identify the most impoverished group of families residing in urban slum of Bhopal City and study their life styles, their attitudes towards the education of their children.

Objectives: (i) To identify the most impoverished group of families residing in urban slums of Bhopal City and to study their life styles their attitudes towards the education of their children, (ii) to ascertain the views of children, employer of these children regarding education and work, and (iii) to develop educational strategies for these out of school children.

Methodology: A sample of 180 children with their parents/guardians and employers were collected from selected slums, i.e. from Railway Station, Bus Stand, Bairagarh, New Bhopal and Old Bhopal. Out of these 180 children 50 were selected for face to face interview. Their parents and employers were also interviewed. A questionnaire was also used as a tool to collect the data.

Major Findings: (1) Most of these working children were in the age group of 10-12 years. Very few were in the age groups of 6-10 and 13-14 years. They were very keen to restart/start learning if situations permitted. Most of them spend their evenings watching TV. In TV the serials having fighting, magic and fun were most interesting to them. Some children work because it was a necessity for them. Others work because

they dropped out from the formal school system and they had nothing else to do. (2) The head of the family had bad habits like drinking, gambling etc. This resulted in quarrels in home affecting the young children. Most parents were illiterate and poor so they could not complete the formalities of admission of their children to schools. They were also unable to bear the educational expenses of their children. (3) Employers wanted that the educational activities for these children should be undertaken either before or after their working hours. (4) The employers were of the view that there was no immediate use of their education but it would be of great help as they grow. They would develop enough confidence to start independent working if they are educated. (5) Some employers were also willing to contribute to the educational efforts undertaken to educate these children. (6) Teachers of the neighbourhood schools denied any kind of discrimination meted out to these children and their parents. (7) They blamed the parents and their children for neglect of education. According to them, the parents did not monitor the progress of their children, and children were more interested elsewhere. So, they quickly dropped out. (8) According to these teachers, the economic health of the parents should be improved if we wish to retain their children in the schools. [0809]

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SINGH, ACHYUT KUMAR AND SINGH, DEOYANI. 1993. **A study of the attitude of learners towards adult education programme in rural Bihar.** *Journal of Regional Studies*, Vol. 4(8), 93-97.

Problem: It is an attempt to study the attitude of learners towards adult education programme in rural Bihar.

Objective: To co-relate attitude with achievements of literacy programme in Bihar.

Methodology: The sample of the study comprised 100 learners between the age group of 20 to 50 years, who were drawn randomly from five villages, one from each of Bhagalpur, Banka, Godda and Dumka. Apart from the government records, questionnaire, interview schedule and Lickert's Attitude Scale were also used as tools for collecting the data. The data were analysed using mean, SD, 't' test and ANOVA.

Major Findings: (1) The attitude of the teachers was generally favourable towards Adult Education Programme. (2) It was found that the age of the learners did not affect their attitude. [0717]

EDUCATION OF THE SC, ST AND MINORITIES

JALALI, JAYASHREE ROY. 1995. **Innovative practices to ensure school effectiveness among deprived groups: Role of the Lai Autonomous District Council of Mizoram.** In, *School Effectiveness and Learning Achievement at Primary Stage: International Perspective.* National Council of Educational Research and Training.

Problem: The study attempts to find out the extent of autonomy exercised by the Lai Autonomous District Council of Mizoram by adopting innovative practices to ensure school effectiveness among deprived groups.

Objective: To diagnose the extent of autonomy exercised by the Lai Autonomous District Council and to identify the impediment in the exercise of its autonomous functioning.

Methodology: The sample of the study covered 10% government lower primary schools in Lawngthlai semiurban area of Chhimtuipui District of Mizoram. Tools used to collect the data included structured interview schedules, apart from the field surveys.

Major Findings: (1) It was observed that the superior infrastructural facilities even in rural areas, resulted in a comparatively low drop-out rate in the lower primary stage. (2) It was found that the accountability of teachers increased substantially due to decentralisation of management. (3) The community participation increased substantially as a result of the transfer of power from the state to the local body. (4) It was observed that administrative decentralisation inculcated the sense of hygiene, pride and belongingness to the school. [0748]

✓PATI, S.P. 1996. **An evaluation of primary school curriculum for tribal children of**

Orissa. In, *Studies on Classroom Processes and School Effectiveness at Primary Stage.* National Council of Educational Research and Training.

Problem: The present study makes an attempt to explore the relevance of prescribed primary school curriculum for the tribal children of the state of Orissa.

Objectives: (i) To know whether the prescribed curriculum is fully/partly same or different for the tribal and non-tribal primary school children, (ii) to explore the relevance of the prescribed primary school curriculum for the physical, cultural, mental, social and moral development of the tribal children, (iii) to ascertain whether or not the prescribed curriculum has been prepared according to the needs and interests of the tribals, and (iv) to suggest measures for modifications of the curriculum.

Methodology: Forty teachers from 35 primary schools who were selected randomly from two tribal districts of Koraput and Mayurbhanj comprised the sample. A Questionnaire was used to collect the data. The collected data were analysed using percentages.

Major Findings: (1) It was found that the curriculum was same for the tribal and non-tribal primary school children. (2) A significant percentage of teachers were of the view that the curriculum followed for the tribal primary school children had not been prepared according to the age levels of the tribal children. Not a single topic included in the primary curriculum was of any use in the day to day work of the tribal children. The surrounding environment had not at all been taken into consideration while preparing the curriculum for the tribal children. There was no provision for agriculture, animal husbandry, etc., in the curriculum prescribed for the tribal children. The prescribed curriculum did not contain topics like preservation of forests, collection of forest products and their marketing, etc., which tribal children need to know. The topics included in the curriculum were partially helpful to accommodate the tribals with the changing time. (3) 50% of teachers were of the view that the topics included in the primary curriculum were partially helpful and the rest 50% were of the view that topics included in the curriculum were not at all helpful for the moral

and spiritual development of the tribal children. (4) A significant percentage of teachers were of the view that the topics included in the primary school curriculum for the tribal children were not at all work oriented. (5) A significant percentage of teachers were of the view that the topics included in the prescribed curriculum were not selected so as to cater to the needs of the tribal children. [0763]

RAMAKRISHNIAIAH, P. 1997. **Patterns of education among the tribes of Telangana region.** Ph.D., Edu. *Osmania Univ.* Guide: Prof. M. Sree Rama Murthy.

Problem: This study is centred upon the patterns such as historical, social, cultural, etc. of education among the tribes.

Objectives: (i) To know the traditional patterns of education among the tribes which are causing obstacles for education of tribes, (ii) to know the cultural patterns of education among the tribes which are clashing with present education, (iii) to find out the economic patterns of education among the tribes which are keeping them away from the present education, (iv) to understand the social patterns of education which are standing in the way of education, (v) to know the ethical patterns and their contribution to education, (vi) to understand the esthetic patterns and their contributions, (vii) to study the stage of readiness and language problems among the tribes for the cause of education, and (viii) to suggest remedial measures for improvement and use of patterns.

Methodology. The sample of the study comprised 60 parents, Nayaks Leaders residing in tribal villages selected from 33 varieties of tribes. An interview schedule (in the form of a questionnaire) was prepared to collect the data for the study. The data were treated qualitatively.

Major Findings: (1) It was found that the traditional beliefs and customs discouraged any change in educational pattern. (2) The traditional life styles were not contributing for the cause of education. (3) Cultural patterns were coming in the way of education and they were not contributing for education (4) Tribal languages were obstacles for education. (5) There was no encouragement for education from tribal

families. (6) It was found that the geographical isolation was one of the causes for not sending their children to school. [0726]

RATH, K.B. AND SAXENA, R.R. 1995. **Effect of pupil and school level variables on the achievement of Scheduled Caste/Scheduled Tribe students.** *Indian Educational Review*, Vol. 30(1), 52-70.

Problem: It attempts to study the effect of pupil and school level variables on the achievement of Scheduled Caste/Scheduled Tribe students.

Objectives: (i) To study how far SC/ST and non-SC/ST students differ in their mathematics and language achievement, (ii) to study what is the difference that exists within schools and/or between schools, and (iii) to study which are the school level factors that minimize such differences.

Methodology: The sample of the study comprised 5,292 SC/ST and 17,771 non-SC/ST students studying in Classes IV/V were selected from eight states, namely Assam, Haryana, Karnataka, Kerala, Maharashtra, Madhya Pradesh, Orissa and Tamil Nadu. Tools used to collect the data included an Achievement Test by Shukla, and apart from this different schedules for teacher, school and pupil were prepared. The collected data were treated with Mean, SD, 't' test, percentage and Hierarchical Linear Regression analysis and mata analysis.

Major Findings: (1) It was found that SC/ST students had significantly low attainment in both language and mathematics in most of the states. From HLM analysis it was found that the low attainment level of SC/ST students in mathematics was prevalent in Haryana, Karnataka, Kerala and Madhya Pradesh. In language also, SC/ST students tended to have low except in Karnataka. Further, the result of meta analysis revealed that the negative effect size was consistent across the states in both the subjects. (2) Regarding variation of negative achievement gap (second question), it was observed that the size of the achievement gap in mathematics did not vary significantly between the schools in any of the states. In Karnataka and Kerala significant differences existed across the school in language scores.

(3) Further, probing of pupil background variables revealed that father's occupation and mother's education played a major role in case of non-SC/ST students. (4) It was found that parental involvement reduced the SC/ST students' achievement gap in language to some extent in Karnataka. In Kerala, frequency of tests given with a provision for feedback on their performance also abridged the achievement gap in the same subject. Other variables like teaching experience, parental involvement, Operation Blackboard and free uniform scheme were negatively associated with the language achievement of SC/ST students. [0723]

SESHADRI, C. AND RAMAMANI. 1995. Home language, school language and learning achievement: A study of Scheduled Caste children. In, *School Effectiveness and Learning Achievement at Primary Stage: International Perspective*. National Council of Educational Research and Training.

Problem: In the present study an attempt has been made to study the home language, school language and learning achievement of Scheduled Caste children.

Objective: To find out the nature and proportion of variation of Scheduled Caste children's home language from standard (textbook language) and the standard colloquial (teacher's language) language with reference to different linguistic levels. Besides, the influence of certain variables like non-verbal intelligence, socio-economic background, sex and type of schools was also studied.

Methodology: The sample of the study comprised 326 Class IV Scheduled Caste children drawn from nine randomly selected schools located in major slum areas of Mysore. The tools used to collect the data were Socio-Economic-Status (SES) Scale, Interview Schedule Scale, Standardised Test based on analysis of textbooks for measuring language proficiency, Non-verbal Group Test of Intelligence and Standardised Achievement Tests in Kannada, arithmetic, science and social studies. The data were analysed by using the 't' test, chi-square, analysis of variance and analysis of covariance.

Major Findings: (1) The SC dialect did not suffer

from any kind of linguistic deficit as it had all the necessary linguistic features. The differences between the dialect and standard forms originated in historical, geographical and social factors. (2) Significant differences were found in the proportions of home language variations from standard and standard colloquial at morphological, syntactical and lexical levels but no such difference was observed at the phonological and semantic levels. (3) Significant differences were found in the proportions of home language variation from standard and standard colloquial between literate and illiterate mothers at all linguistic levels. (4) There was no significant difference in the mean score of the total academic achievement, adjusted for language proficiency of SC children classified on variations of home language from standard language and standard colloquial at all linguistic levels except at the semantic and the lexical respectively. [0732]

SHUKLA, NEERJA. 1995. Effectiveness of various interventions for improving tribal education. In, *School Effectiveness and Learning Achievement at Primary Stage: International Perspective*. National Council of Educational Research and Training.

Problem: This study attempts to study the effectiveness of various interventions for improving tribal education.

Objective: To survey the current status and effectiveness of the schemes planned for improving education of Schedule Tribes children.

Methodology: The study was based on secondary information available in the annual reports, statistical data, educational plans and tribal sub-plans of the States. Three instruments were specifically prepared to collect the relevant information.

Major Findings: (1) States differed from each others in terms of intervention planned for their ST population both in quality and quantity due to difference in the need of target groups in various stages. (2) No specific teacher preparation programme had been developed by the states to orient teachers in the methodology of teaching tribal children and made use of their

environment and culture to improve the quality of teaching. (3) The interventions were planned at the state level instead of at the level of tribal habitation. Most of the interventions were of welfare nature and did not cover total population. Their benefits were not reaching children in time. (4) The financial assistance provided under various interventions like scholarships, stipends and attendance allowance was inadequate and very few states had schemes to identify talented ST children. (5) There was no specific scheme for ensuring the achievement level of ST children and quality instructional material in tribal dialects. [0733]

WILSON, M.J. 1997. **The study of the people's participatory management school in tribal areas of Visakhapatnam District (AP): A case study.** *Journal of Educational Research and Extension*, Vol. 34(2), 50-58.

Problem: It attempts to study the impact of participation of the tribal community in the growth and development of school management in the tribal areas of Visakhapatnam District.

Objectives: (i) To study the gaps in establishing the working condition and performance of Maa Badi (OUR SCHOOL) as per the guidelines laid out by the Integrated Tribal Development Agency, and (ii) to find out the extent of the participation of the tribal community in the growth and development of Maa Badi schools.

Methodology: The sample of the study comprised 70 tribals (60 men and 10 women), who were drawn from two tribal villages, namely Mangabanda and EGUA Pedapalli of Visakhapatnam District (AP). Participatory Rural Appraisal (PRA) technique was administered for facilitation of participation and getting feed back on the working condition of Maa Badi School. A sound report was built up with the help of community organisers who were in the investigation team.

Major Findings: (1) It was found that the people's participation to establish the Maa Badi School was successful in both the villages. (2) The factors on the school location, basic infrastructure, teaching aids and teaching procedure were satisfactory in both the villages. (3) It was observed that the school performance

system such as conducting tests regularly was being undertaken in both villages. However, promotional procedures were not very well structured in the guidelines. (4) The children health care in the high altitude environment measures available in both the villages was found satisfactory. (5) The tribal people's participation in the management of Maa Badi School was found to be highly satisfactory. [0712]

GIRLS AND WOMEN EDUCATION

NAYAR, USHA. 1995. **Planning for UPE of girls and women's empowerment: Gender studies in DPEP.** In, *School Effectiveness and Learning Achievement at Primary Stage: International Perspective*. National Council of Educational Research and Training.

Problem: It attempts to study the universalising primary education among girls with a focus on women's equality and empowerment.

Objectives: (i) To identify the factors affecting the dropout and non-enrolment of girls at primary level, and (ii) to suggest the ways and means to reduce the dropout rate and enhance the enrolment of girls.

Methodology: The study is based on the outcomes of pre-project DPEP studies carried out in 44 districts of different states in India. Structured Individual Interviews, and Group Discussion were used as tools to collect the data. The collected data were treated with percentages.

Major Findings: (1) The study revealed large variation between educationally advanced and educationally backward states. There were inter-state and inter-district variations also. (2) Household related factors such as domestic work, sibling care, parent illiteracy and apathy, and community factors like early marriage appeared to be major constraints against girls' education. (3) Various measures suggested to reduce the dropout rates and enhance the enrollment of girls included: (a) formation of special schemes to prepare women teachers for rural areas from rural areas; and (b) provision of free books, free stationery, uniforms, shoes and waiving off all extra tuition levies. [0750]

POPULATION EDUCATION

PATTANAIK, B.K. 1996. **Adult literacy and family planning methods.** *Adult Education and Development*, Vol. 9 (5 & 6), 6-10.

Problem: It attempts to study the impact of literacy on adoption of different family planning methods in controlling fertility.

Objectives: (i) To find out the impact of literacy on percentage acceptors of different family planning methods among Hindu, Harijan and Muslim, and (ii) to find out the correlation between literacy and acceptance of different family planning methods.

Methodology: The study was conducted in six villages of the Saharanpur District of Uttar Pradesh. Out of six villages, two each were dominated with Muslim and Hindu population respectively. An interview schedule consisting of questionnaire on level of education and use of different family planning methods was used for collection of data. The collected data were treated with coefficient of correlation.

Major Findings: (1) Education and literacy had a positive impact on the use of family planning methods and consequently on fertility control. (2) Education and literacy generated awareness regarding the availability and use of modern family planning methods and discouraged the use of traditional methods of birth control. [0841]

RAO, SUDHA V. AND BAIG, ASLAM. 1998. **Teacher educators' awareness and attitude towards population education: A regional study.** *Perspectives in Education*, Vol. 14(4), 235-244.

Problem: The present study is designed to evaluate the level of awareness and attitude of secondary teacher educators in colleges of education in the southern region.

Objective: To evaluate the level of awareness and attitude towards population education, and also relate it to other important variables of sex, formal training and teaching experience.

Methodology: The sample of the study covered 297 secondary teacher educators (167 male and 130 female) from B.Ed. colleges of the Southern

Region. The collected data were treated with ANOVA, 't' test, multiple regression and correlation coefficient.

Major Findings: (1) Teacher training and teaching experience had no influence on awareness level in any of the core areas of population education. (2) Male teacher educators had a higher level of awareness in the core area of population change and resource development. (3) Teacher training and teaching experience did not show influence on any of the core areas of attitude. (4) Sex of the respondents was a significant factor in the attitude level of delayed marriages. (5) Awareness in the core area of family size and family welfare influenced significantly the core areas of attitude to population education. The remaining core areas of awareness had no relationship with any of the core attitude areas. (6) The cluster analysis of correlation-coefficients among the variables clustered together. [0842]

ECOLOGICAL AND ENVIRONMENTAL STUDIES IN EDUCATION

BHATTACHARYA, G.C. 1996. **A study of environmental awareness among primary grade girl students and their parents in Varanasi.** Independent study. Allahabad: State Institute of Educational Management and Training.

Problem: This study addresses the problem of girl's education in general and the condition of primary grade girl students and their parents in terms of their environmental awareness.

Objectives: (i) To find out the level of environmental awareness among parents and their girl students studying at Grades III and V in Varanasi, (ii) to find out the difference between environmental awareness of the boys and girls students studying in III and V Grades of primary education in Varanasi in terms of orientation, attitude and responsibility factors, and (iii) to determine correlation between the III and V Grades girl students of primary education in Varanasi and their parents in terms of environmental awareness.

Methodology: The sample of the study comprised 110 boys and 180 girls student of Grades III

and 91 boys and 89 girl students of Grade V along with their 269 parents were drawn from five categories of primary schools, i.e. Municipal Board, Private Organisation, English Medium, Minority Institution and Central Schools in Varanasi. Measure of Environmental Awareness Scale of Singh and Rao was used as a tool to collect the data. The collected data were analysed using 't' value, and coefficient of correlation.

Major Findings: (1) Among the primary girl students studying in Grade III, only 44.44% was in the above average, 48.89% was in the below average, 6.67% was in the low categories and none was there in the high category. (2) Among the girl students studying in Grade V, only 57.30% was in the above average, 37.08% was in the below average, and 5.62% was in the low categories and none was found in the high category. (3) Among the parents of Grade III girl students, only 11.11% was in high, 67.78% was in above average, 8.89% in below average and 2.22% was in low categories. (4) Among the parents of Grade V girl students, only 7.87% was in high, 42.69% was in above average, 47.19% was in below average and 2.25% was in the low categories. (5) No sex difference was found in the case of Grades III and V girl students in terms of their environmental awareness. (6) No sex difference was found in case of Grades III and V girls students in terms of orientation, attitude and the responsibility factors of environmental awareness. (7) The coefficient of correlation was found to be significant in case of environmental awareness of the Grades III and V girl students and their parents. [0817]

EDUCATIONAL ASSESSMENT AND EVALUATION

RAJPUT, SARLA AND AGRAWAL, MAMTA. 1996. **A study of the evaluation practices in primary schools of Delhi.** In, *Studies on Classroom Processes and School Effectiveness at Primary Stage*. National Council of Educational Research and Training.

Problem: The present study examines the importance and significance of evaluation at the primary school stage as a device for quality improvement.

Objective: To identify the process and procedures

of evaluation practices adopted in primary schools of Delhi.

Methodology: The sample constituted 25 schools viz. government aided, MCD, NDMC schools, Kendriya Vidyalayas, private public schools and unrecognised schools. Questionnaires and investigation diary were used for gathering information on instructional practices and question papers of Class II and report cards were collected for the purpose of analysis. The collected data were analysed qualitatively.

Major Findings: (1) All the schools had a well designed system of evaluation. (2) Weightage given to different tests and examinations were more or less same in all the schools except in Kendriya Vidyalaya. (3) More weightage was given to knowledge than to understanding and skill. (4) Private and public schools gave more attention to assignments, project work and oral work than the state run schools. (5) Adequate attention was not paid on evaluating the non-scholastic areas of performance. [0756]

REDDY, V.N. AND CHATTOPADHYAY, RAGHABENDRA. 1995. **Towards a sample design for large sample educational evaluation surveys.** In, *School Effectiveness and Learning Achievement at Primary Stage: International Perspective*. National Council of Educational Research and Training.

Problem: The present study highlights the drawbacks of samples in large scale sample surveys which are selected using random sampling without replacement or stratified designs for different evaluation surveys conducted in the field of education in India.

Objective: To provide a proper sampling design for different evaluation surveys conducted in the field of education, e.g. primary education, total literacy campaigns, etc.

Methodology: This is a theoretical conceptual paper, in which the limitations and shortcomings of traditional Simple Random Sampling (SRS) design have been highlighted. As an alternative, Stratified Circular Systematic Sampling (SCSS) design has been suggested, wherein the variable under consideration is arranged in ascending or descending order

based on an available auxiliary information. The first unit is selected on random basis and subsequent units are selected on proportional gap basis, so that all the units selected are equidistant.

Major Outcomes: (1) The geographical coverage of the attributes needs to be ensured right at the beginning. (2) The sample size need not be increased beyond a limit even if the population is very large. (3) Non-sampling error is thus minimised by taking the entire class or classes within the school and no substitution is to be attempted while the survey is conducted. (4) The design need to capture the rare attributes more definitely as compared to the simple random sampling technique (SRS). (5) The geographical spread of the sample can ensure precise estimates both at the aggregate and the disaggregate levels. Inter-regional and intra-regional estimates remain equally precise. (6) The design takes into account the available auxiliary information and thus generates better estimates. (7) Since the number of random numbers used is low and the sample units within a stratum is systematically related to the randomly selected first unit, and since the universe is orderly listed to draw samples, the scheme remains totally transparent to third party scrutiny. [0740]

EDUCATIONAL PLANNING AND POLICY RESEARCH

CHATTOPADHYAY, RAGHABENDRA. 1995. **Universalisation of primary education and dropouts — A policy bug.** In, *School Effectiveness and Learning Achievement at Primary Stage: International Perspective*. National Council of Educational Research and Training.

Problem: The study has attempted to analyse the gaps, faults, and misinterpretations inherent in the methods generally adopted to arrive at the enrollment and dropout figures using school statistics.

Objective: To find out an alternative methodology using a large scale household survey to arrive at enrollment and dropout figures at the primary stage of education.

Methodology: In the year 1989, Class I students of 198 primary schools of Assam in 110 villages and 30 urban units covering all the 23 districts of Assam, and Class I students of the same year of primary schools of 10 villages of Medinipur Districts of West Bengal were taken as sample of the study. An household survey was conducted to gather information about the educational progress of Class I students in 1989 for the last 4 years. The collected data were treated with the help of cohort analysis.

Major Findings: (1) Dropout calculated from the school statistics was much higher than the actual dropout rate because of the highly inflated Class I figures. (2) Actual enrollment was way below what was found from official statistics. (3) Poverty was one of the reasons for both non-enrollment and drop-out, but it was more so for non-enrollment. (4) More than 50% of the total drop-out was due to non-economic reasons. [0742]

RAMARAJU, RUKMINIYAMMA. 1997. **Impact of international cooperation on selected fields of Indian education.** Ph.D., Edu. Shreemati Nathibai Damodar Thackersey Women's Univ. Guide: Dr. Padmakar M. Sapre.

Problem: It attempts to study the impact of international co-operation in the areas of teacher education, science education and population education.

Objectives: (i) To trace the evolution of international cooperation in the areas of teacher education, science education and population education, (ii) to examine the nature, scope and activities of the programmes and projects launched in the three selected areas with international cooperation, and (iii) to assess the impact of international cooperation in the three selected areas.

Methodology: The researcher has used historical method. The data were collected from various sources which included published and unpublished printed materials including reports and other publications of state agencies, professional and voluntary organizations both national and international, books, journals, research reports, newsletters, bulletins, resource books, project studies, articles and

abstracts, interviews with selected educationists, educational administrators and researchers associated with international cooperation projects in the three areas. The collected data were treated qualitatively.

Major Findings: (1) The international co-operation in the areas of teacher education, science education and population education had a mixed impact. (2) Microteaching has become an integral part of the teacher education programmes of a number of teacher training institutions. The same is true, though not entirely, of models of teaching. In contrast, the concept of a four-year integrated programme of teacher education did not seem to have been accepted at the national level as evidenced by its non-replication in other institutions. (3) In science education, "learning by doing approach" of "discovery approach" stimulated learning of science in school children even in rural areas. International co-operation in the development of science kits for schools enhanced the developed capability of our technicians and generated sustainability. (4) Participation of international organisations like UNESCO, UNICEF, UNDP, UNFPA accelerated co-operative activities in science education at all levels of school education. This indicated the significant impact international co-operation has made towards the development of science education. (5) UNESCO and UNFPA gave a substantial thrust to conceptualising population education, policy and programmes in India. The Population Education Service (PES) has assisted (i) pointing specific needs and areas in population education (ii) awareness of and orientation to population education (iii) planning population education programmes (iv) implementing national programmes, and (v) developing a reservoir of national expertise. (6) Recent changes in social awareness and concern about sex education and related issues, such as AIDS, have helped to strengthen the need for reconceptualising population education in schools. (7) Objective and scientific treatment of population education in schools has brought awareness in children regarding the need for limiting family size, as a way to improve the quality of life. (8) The competence and credibility of prestigious institutions like NCERT, NCTE, UGC, NIEPA, for providing leadership at various levels of educational planning and administration are

largely the result of sustained international co-leadership. (9) The importance of regional co-operation was emphasized by scholars and researchers during the year 1970s. The APEID has since its inception, taken concrete steps to achieve the goals. [0738]

ORGANIZATION, ADMINISTRATION AND MANAGEMENT OF EDUCATION

JHA, MADAN MOHAN. 1997. **Evolution of cluster resource centres as institutions for teacher empowerment and school effectiveness: A case study.** In, *Teacher Empowerment and School Effectiveness at Primary Stage: International Perspective*. National Council of Educational Research and Training.

Problem: The study intends to examine the inputs and the intervention leading to the changes in attitude and behaviour of teachers towards children, school and the community and to study the perception of teachers and community towards school effectiveness in rural areas.

Objectives: (i) To examine the inputs and the interventions leading to the changes in attitude and behaviour of teachers towards children, schools and the community, and (ii) to study the perception of teachers and community towards school effectiveness in rural areas.

Methodology: A training module for the primary school teachers was tried out and subsequently scaled up in the seven districts of Bihar under UNICEF supported Bihar Education Project (BEP) between September 1995 — December 1996. The training philosophy, the processes and the strategies leading to the evolution of teacher centres or the Cluster Resource Centres (CRCs) as institutions for teacher empowerment and school effectiveness in rural areas have been documented in the shape of a 'case study'.

Major Findings: (1) It was found that at the end of the training period teachers appeared transformed into committed and motivated individuals, ready to put in their best to improve their school environment and work towards the goal of UPE. Teachers' absenteeism went down considerably and punctuality improved.

(2) There were visible changes in most of the schools — a clean and colour washed school with a blackboard all around for the use of children along with colourful charts and pictures donning the walls — thus making the school attractive and children friendly. (3) The teachers made concerted efforts to enlist the participation of the community in the activities of the schools, especially in the areas of doing up the schools and to some extent in the day-to-day running of the schools. (4) There were perceptible changes in the learning environment marked by plenty of singing and other joyful activities, thereby bringing about a friendly and open relationship between the teachers and children. There were increased number of teachers developed teaching/learning materials and their usage. (5) There were reports of enhanced enrollment and attendance, particularly those of girls. (6) Closed schools were open being run with community assistance even in extremists' pockets of Chatra District. (7) Parents began to look at children's achievement and teaching-learning in the classrooms. (8) There was cooperative spirit in the CRC meeting and teachers tried to learn from each other's experiences. [0791]

KHETARPAL, INDU. 1996. **Interpersonal skills used by heads of primary sections of performing and non-performing secondary schools.** In, *Studies on Classroom Processes and School Effectiveness at Primary Stage*. National Council of Educational Research and Training.

Problem: The present study attempts to study the difference between the interpersonal skills used by the heads of performing and non-performing schools.

Objectives: (i) To develop criteria for identifying performing and non-performing schools, and (ii) to examine the difference between the interpersonal styles of the heads of performing and non-performing schools on the basis of the developed criteria.

Methodology: The study was conducted on a sample of twenty schools in Delhi in 1996. The data were collected from seven government schools, four government aided schools and nine private schools. The collected data were treated with the Mann-Whitney U-test.

Major Findings: (1) The heads of performing schools used interpersonal skills which helped generation of congenial environment. (2) The heads of performing schools encouraged the staff and students to develop and provide necessary conditions for continuous improvement and professional growth. (3) The primary headmasters of performing schools were adaptive and generative learners, while the heads of non-performing schools were only the adaptive learners. [0765]

OZA, JAYASHREE. 1996. **Quality management approach to school reforms.** In, *Studies on Classroom Processes and School Effectiveness at Primary Stage*. National Council of Educational Research and Training.

Problem: It attempts to enhance institutional effectiveness in providing quality education by using concepts and practices based on management principles.

Objective: To enhance institutional effectiveness in providing quality education by using concept and practices based on management principles as the lead input.

Methodology: The pilot project was undertaken in ten socio-economically marginalised schools in Delhi. The model of intervention, described as Total Quality Cycle (TQC), consisted of situational reviews, analysis and identification of issues, statement of desired goals, development and implementation of improvement plans, results, recurrence prevention and future plans.

Major Findings: (1) The schools developed vision on methodology of institutional planning. (2) Leadership style of principals were changed and they became more open, trusting and sensitive to staff. (3) Positive change was observed in teacher's self perception, communication skills and evaluation of students. [0835]

PADIL, J.S.; JADHAO, V.G. AND RATH, K.B. 1997. **Effect of school climate indicators on learners' achievement at primary stage: Teacher empowerment issues.** In, *Teacher Empowerment and School Effectiveness at*

Primary Stage: International Perspective. National Council of Educational Research and Training.

Problem: It attempts to identify a few climate factors which make the school more effective, teachers more empowered and students better achievers.

Objective: To study the effect of school climate indicators on learners' achievement in mathematics and language.

Methodology: A sample of the study comprised 1756 pupils (1126 boys and 630 girls) of Class V and 508 teachers from 188 schools were selected from the DPEP districts of Orissa. Tools used to collect the data included Mathematics Achievement Test, Language Achievement Test and Schedules, all developed by the NCERT. The collected data were treated with correlations, and Hierarchical Linear Model.

Major Findings: (1) Teachers regularly gave adequate homework, minutely corrected them, frequently tested followed by feedback, engaged pupils to solve arithmetic problems in the class with close supervision and this increased their mathematics achievement. The composite contribution amounted to 47.5%. (2) Teachers regularly assigned homework and their correction enhanced language achievement about 19%. [0787]

PATTHAK, P.N.; GUPTA, V.P.; KHAN, K.K. AND KHAN, Z.A. 1997. **A comprehensive study of learning achievement of children of Class I studying in Shikshak Samakhya Schools of Katni and Patan Blocks of Jabalpur District.** In, *Teacher Empowerment and School Effectiveness at Primary Stage: International Perspective.* National Council of Educational Research and Training.

Problem: The present study is a comprehensive study of learning achievement of Class I students studying in Shikshak Samakhya Schools of Katni and Patan Blocks of Jabalpur District.

Objective: To assess the learning achievement of Class I children studying in Shikshak Samakhya Schools.

Methodology: The sample of the study comprised 348 children, belonging to semiurban and rural areas, of Class I studying in seven schools of Patan Blocks of Jabalpur Districts. Their age ranged between 6-7 years. Language and mathematics tests were administered on 179 and 169 children respectively to collect the relevant information.

Major Findings: (1) Performance of children of semiurban schools of Katni block was found better in both the subjects. (2) Percentage of children attaining the mastery level in all the test items, both in mathematics and Hindi language, was found higher in case of children belonging to the schools of Katni block which had a semiurban setting. (3) The development of basic skills of reading, writing and identification of numbers and simple sums of addition and subtraction operations were still halfway. [0789]

PURAVI, K. 1998. **Organizational climate and teacher burnout in primary schools in Pudukkottai District.** Ph.D., Edu. Alagappa Univ. Guide: Dr. S. Mohan.

Problem: The present study tries to find out reasons for the stress and burnout of the primary school teachers.

Objectives: (i) To find out the existing level of the organizational climate of primary school in Pudukkottai District, (ii) to find out the extent of burnout experienced by the teachers of primary school, (iii) to find out the influence of management, age, sex period of service and location, etc. on teacher burnout, and (iv) to find out the relationship between the organizational climate and teacher burnout at primary school level.

Methodology: The sample of the study comprised 410 primary school teachers who were selected by random sampling techniques from Pudukkottai District. The tools used to collect the data included Organizational Climate Description Questionnaire (OCDQ) by Mothilal Sharma, Teacher Burnout Inventory by the Investigator and Personal Data Sheet. The collected data were analysed using mean, SD, 't' test and chi-square.

Major Findings: (1) Primary teachers had higher level of organization climate and teacher burnout. (2) Especially in the organization climate they were more concerned with disengagement, alienation, physical hindrance and control. (3) Likewise in burnout they were more concerned with psychological, physical, socio-psychological and familial issues. [0713]

SEETHARAMU, A.S. 1995. **Structure and management of education in Karnataka State: Imperative of the 73rd Constitutional amendment and Karnataka Panchayat Raj Act, 1993.** In, *School Effectiveness and Learning Achievement at Primary Stage: International Perspective*. National Council of Educational Research and Training.

Problem: The present study discusses the constitutional imperatives and issues underlying the reconciliatory process of democratic decentralisation.

Objective: To study the effect of decentralization of primary education at the level of Panchayat Raj administration in the State of Karnataka.

Methodology: The study was conducted using documentary analysis, field observations and interviews with personnel who functioned during 1987 to 1992 for Panchayat Raj experiment.

Major Findings: (1) The study revealed that the retention rate of students increased. (2) It was observed that full and effective decentralization of powers and functions were not yet delegated to the Panchayat Raj Bodies. (3) It was found that half of the Panchayat Raj members were illiterate and male domination was found to be prevalent in the management of education. (4) It was observed that the differences between elected representatives and government officials over administrative power existed. [0749]

CORRELATES OF ACHIEVEMENT

BORBORA, RUPA DAS. 1998. **The impact of socio-economic status on the academic achievements of the first generation learners (FGLs).** Ph.D. Edu. Gauhati Univ. Guide: Dr. Nandita Sarma.

Problem: This study mainly stresses on finding out the rate of academic achievement of the first generation learners irrespective of the caste and class (advance class or high caste and backward class or low caste), to which they belong.

Objectives: (i) To study the influence of social classes, i.e. advance class and backward class on the academic achievement of the first generation learners, (ii) to study the effect of economic status, i.e. high income level, middle income level and low income level on the education of the children, (iii) to compare the academic achievements of the first generation and non-first generation learners of advance and backward classes, (iv) to compare the extent of wastage and stagnation between the first generation learners and non-first generation learners of advance and backward classes, (v) to study the values and attitudes of the literate (parent of non-first generation learners) parents with a view to find out their effect on the learning process of their children, and (vi) to study the problems faced by the first generation learners of different social classes and economic groups.

Methodology: A sample of 1026 children drawn randomly from north, south, east and west parts of Kamrup District from 24 primary schools, of which 575 children belonged to advance class (303 FGLs and 272 NFGLs). Likewise 451 children belonged to backward class (310 FGLs and 141 NFGLs). The tools used to collect the data included inquiry forms, interview schedules and Attitude Scale of Likert's type. The collected data were treated with 't' test, chi-square and ANOVA.

Major Findings: (1) No significant difference was found in academic achievement of the FGLs between advance and backward classes. (2) It was found that the academic achievements of the children in three income levels were significantly different. (3) Both in advance and backward classes the significant difference in academic achievement between FGLs and NFGLs was observed. (4) A high significant difference in attitude of the parents of first and non-first generation learners was observed. [0815]

✓ DEOPURIA, R.P. 1997. **Comparative study of the achievement of Class II students taught through teacher empowerment project and traditional teaching approach in some selected schools of Jabalpur District.** In, *Teacher Empowerment and School Effectiveness at Primary Stage: International Perspective*. National Council of Educational Research and Training.

Problem: The present study aimed to compare the cognitive achievement of students taught through teacher empowerment project and traditional teaching in some selected schools of Jabalpur District.

Objectives: (i) To study Class II students' achievement taught through teacher empowerment project both in Hindi and mathematics, (ii) to compare the cognitive achievement of Class II students taught through teacher empowerment project and traditional teaching approach, and (iii) to study the enrollment, retention and dropout of children at teacher empowerment project school and traditional schools.

Methodology: The sample of the study consisted of six schools of two blocks in which the teacher empowerment project was running, were selected as experimental group. Six schools of two blocks in Jabalpur District in which traditional teaching was running, were selected as the control group. Thus each group had 141 students. Tools used to collect the data included Achievement Test of Hindi and Mathematics, Non Verbal Coloured Progressive Matrices Test and Interview Schedule developed by the investigator. The collected data were treated with mean, SD and 't' test.

Major Findings: (1) The experimental group students of Class II obtained high achievement scores both in Hindi and mathematics as compared to the controlled group. (2) Dropout rate of teacher empowerment project schools was very low and there was improvement of enrollment in Class I within one year. [0806]

✓ JOSHI, SNEHA AND BISWAL, ASHUTOSH. 1996. **Impact of teacher's behaviour in terms of management of available learning resources**

on scholastic achievement and interest of Standard V primary school children. In, *Studies on Classroom Processes and School Effectiveness at Primary Stage*. National Council of Educational Research and Training.

Problem: It attempts to study the impact of teacher's behaviour in terms of management of available learning-resources on scholastic achievement and interest of Standard V primary school children.

Objective: To examine the effect of management of learning resources by teachers on scholastic achievement and interest towards teaching-learning of Standard V students, taking intelligence and SES as co-variates.

Methodology: The sample comprised 90 students of Class V studying in four schools of Baroda City, covering state government schools, private aided schools, corporation schools, central schools and public schools. The tools used to collect the data included Shukla's Test of Measuring Intelligence, Achievement Tests, Interest Inventory, and Socio-economic Status Inventory. The data were analysed using ANCOVA.

Major Findings: (1) The achievement in English, mathematics, science and social studies of students in well managed schools of learning resources was significantly higher than the achievement among the poorly managed schools of learning resources. (2) On Hindi achievement, when intelligence was taken as a co-variate, the two quality managed schools did differ significantly. While, on Hindi (with SES as a co-variate) and Gujarati achievement, the two quality managed schools did not differ significantly. (3) The mean interest score of students from schools with well management of learning resources was significantly higher than that of students from schools with poor management of learning resources. (4) The management of learning resources and interest of Standard V students towards teaching-learning were directly related. [0774]

MOJIAN, RADHA. 1997. **A discriminant function model for identification of high school students on the basis of academic achievement.** *Journal of Educational Research and Extension*, Vol. 34(2), 34-49.

Problem: The present study intends to build a discriminant function model to identify high school students on the basis of academic achievement.

Objective: To study the best discriminating variables that can be selected according to their ability to discriminate between high academic achievers and low academic achievers.

Methodology: The sample of the study comprised 415 students randomly drawn from three types of high schools of Kottayam District. The tools used to collect the data included total marks obtained by the Navodaya Vidyalaya students in the half yearly examination, 'Thinking Creatively with Words' by Baquer Mehdi and Socio-economic Status Scale by Bharadwaj, Gupta and Chauhan. The collected data were analysed using mean, SD, chi-square, ANOVA and multiple regression.

Major Findings: (1) It was found that performance differences between boys and girls were marginal and not statistically significant. (2) Hindus and Christian students had a higher proportion in high academic achiever (HAA) as compared to Muslim students. (3) There existed a significant difference in academic achievement of students belonging to different religions in Kottayam District. (4) A discernible difference was found between English medium and Malayalam medium students in their academic achievement. (5) It was found that Navodaya Vidyalayas promoted academic achievement followed by unaided schools. The lowest mean was obtained by the students of the Government Schools. (6) English medium students performed better academically than Malayalam medium students. (7) It was found that socio-economic status had the highest correlation with the discriminant function D (creative thinking). The high level of influence that socio-economic status had on student academic achievement indicated a need for a more egalitarian background — free mid-day meals, free uniforms, and free textbooks. [0711]

SHUKLA, SNEHLATA. 1995. **Attainment of primary school children in various Indian states.** In, *School Effectiveness and Learning Achievement at Primary Stage: International Perspective.* National Council of Educational Research and Training.

Problem: The present study tries to assess the attainment of primary school children in various Indian states.

Objective: To assess the level of achievement of children at the end of primary school in the mother tongue and in numeracy.

Methodology: The sample comprised 65,871 pupils drawn randomly from 4,700 schools in 23 Indian States and the Union Territories. The data were collected with the help of two specific tests one in language and other in mathematics. Besides, three questionnaires were also used to gather the relevant information. Collected data were treated with multiple regression analysis.

Major Findings: (1) It was found that on an average reading comprehension was poor than in arithmetic. (2) Teachers' knowledge of subject matter was highly inadequate both in language and mathematics. (3) New textbooks did not seem to have helped very much. (4) There was no difference in the achievement of children from urban or rural areas. (5) The difference in the achievement of boys and girls also varied from state to state. (6) The performance of SC and ST students had been found to be lower than the general and backward class category. (7) The achievement of primary school children differed widely over the states. (8) The child's ability, his home background, facilities for learning and educational environment at home influenced his learning of school related tasks. (9) No generalisation could be made regarding the mutual role of home and school related variables vis-a-vis differences in achievement. (10) There was evidence of positive impact of the extent of in-service education received by the teachers on pupil's learning. (11) It was observed that no detention policy had a negative influence on achievement. [0731]

SINGH, SATVIR; SAXENA, R.R.; JAIN, V.K.; ARORA, O.P.; RATH, K.B.; GUPTA, J.K. AND GUPTA, M.K. 1995. **Effect of school policies and practices on students' achievement.** In, *School Effectiveness and Learning Achievement at Primary Stage: International Perspective.* National Council of Educational Research and Training.

Problem: It attempts to study the effect of school policies and practices on students' achievement.

Objective: To study the effect of school policies and practices and state interventions on student achievement in language and mathematics.

Methodology: The study is based on the Baseline Assessment Studies (BAS) data collected from 1,746 schools, 4,879 teachers and 23,700 students from 44 DPEP districts of DPEP Phase-1 states. HLM analysis was used to treat the data.

Major Findings: (1) The achievement of students in mathematics and language varied substantially across states. (2) Duration of teachers' stay in school had positive relation with school mean achievement. (3) Teaching experience had negative association with language and mathematics achievements in the state of Kerala. (4) In-service training of teachers was negatively associated with achievement in mathematics in Karnataka and language in Kerala. (5) Access to teaching material and educational facilities contributed to the mathematics achievement of children. (6) Supply of mid-day meals to students had a significant positive effect on language achievement of students. (7) Teachers' qualification was negatively associated with the gender achievement gap in mathematics, whereas it was positively associated with the language achievement gap. (8) The OB scheme had positive and significant impact on achievement in mathematics and language. [0730]

VARGHESE, N.V. 1995. School effects on achievement: A study of government and private aided schools in Kerala. In, *School*

Effectiveness and Learning Achievement at Primary Stage: International Perspective. National Council of Educational Research and Training.

Problem: The present study tries to examine the factors which affect the learners' achievement of government and private aided schools in Kerala.

Objective: To identify factors influencing learner achievement in government and private aided schools.

Methodology: Using multistage random sampling design 113 schools with a total number of 8089 students from Grade IV were selected from three educationally backward districts of Kerala — Malappuram, Kasargoda and Wayanad. Two tools, Language Achievement Test (LAT) and Mathematics Achievement Test (MAT) in Malayalam, were administered to collect the data. The Hierarchical Linear Model (HLM) was used for analysis of the data.

Major Findings: (1) Achievement differences in government schools was less than in private schools. (2) Factors within school accounted for 80% of variance in mathematics achievement and 86% in language in the sampled schools. (3) Socio-economic status, aspiration of the child and extra reading material had a positive influence on learner's achievement. (4) Presence of repeaters in government schools depressed the achievement levels. (5) Girls performed better in government than in private schools in language. (6) Children belonging to poorer social background and with less educated parents lagged behind others in achievement. [0736]

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FOREWORD

The *Indian Educational Abstracts (IEA)* started during July 1996, as a strategy of the Sixth Survey of Educational Research, has sustained itself satisfactorily. So far, six issues (bi-annually) have already been brought out. The present issue is a combined one covering the seventh and eighth issues. It covers abstracts of 62 doctoral studies, one independent study, and 138 studies from professional journals taking the total to 201 abstracts which are classified under different chapters. To facilitate readers, different indices, i.e., Subject Index, Author Index, University Index, Journal Index and Faculty Index have also been given. With the present issue of the IEA so far 1125 abstracts have been covered and also disseminated.

It would not have been possible to accomplish this task but for the cooperation extended by the doctoral holders, editors of professional journals and independent researchers.

It is hoped and wished that the Heads of Departments of Education and allied disciplines cooperate with us by way of enabling us the doctoral study abstracts through their candidates, departmental guides and by providing us the independent research study abstracts. The editors of various professional journals have also been contributing substantially to the success of the project. It is hoped that in future also the NCERT would get their cooperation and the project continues to serve more and more researchers and others who matter in education. Any suggestion to improve the quality of abstracting services would be a welcome.

New Delhi
22 June 2000

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PHILOSOPHY OF EDUCATION

ARUNA, G. 1992. **Psychological and educational implications of J. Krishnamurthi's observations of life and relationship.** Ph.D., Edu. Nagarjuna Univ. Guide: Prof. T.J. Rajendra Prasad.

Problem: This study attempts to analyse and organise human nature in terms of psychological structure and function out of J. Krishnamurthi's observations of human life with a view to imply in educating human beings.

Objectives: (i) To analyse the content of J. Krishnamurthi's observations, (ii) to find out the place of these explorations both in technical and psychological fields, (iii) to find out the authenticity of these observations in relation to other psychologists' findings, and (iv) to discuss the place of Krishnamurthi's contributions, in terms of values and relevance in the field of education.

Methodology: Content analysis of J. Krishnamurthi's observation was done from 48 source books of the author.

Major Outcomes: (1) J. Krishnamurthi's revolutionary approach to the complexity of human psychological structure gives a new perspective by which one can find pointers to develop an integrated personality. (2) Teachers and students can sit in silence, observe their chattering minds with various forms of thought and the resultant feelings to be free of all conditioning. To make the child feel secure, parents, teachers and students have to talk and enquire in an atmosphere of freedom. (3) To live as integrated beings—human beings—besides acquiring knowledge in their field of interests can be self-knowing without condemning, justifying, evaluating to be psychologically free and to be in right relationship. They are to be in silence or in meditation to enrich ones' energies. [1103]

SOCIOLOGY OF EDUCATION

KRISHNAMALL, P. 1994. **Effect of socio-economic environment on child-care system.** *Journal of Community Guidance and Research*, Vol.11(1), 1-12.

Problem: It attempts to investigate the effect of socio-economic environment on child-care system

Objective: To study the effect of socio-economic status as well as socio-cultural factors upon child-care practices.

Methodology: Using the random sampling technique 500 mothers were drawn who had children below twelve years of age in their families. A rating scale was used as a tool. The collected data were treated using percentage, mean, SD, and 't'-test.

Major Findings: (1) Family composition and size did not affect child-care practices of mothers apart from the employment status. (2) Higher the level of education, income and community status greater was the influence on child-care practices of mothers [1113]

MATHUR, KIRAN. 1996. **Maternal employment and the use of disciplinary techniques.** *Indian Educational Review*, Vol.XXXI(1), 12-22.

Problem: This is an attempt to study the pattern of child-rearing methods adopted by employed mothers (EMs) as well as unemployed mothers (UEMs).

Objective: To study what type of disciplinary practices are generally used by working and non-working mothers.

Methodology: The sample comprised 200 mothers out of which 120 were employed and 80 were full-time housewives belonging to middle and upper-middle class socio-economic backgrounds from Bhopal City. Subjects were administered an open-ended questionnaire. Collected data were treated with percentages and chi-square.

Major Findings: (1) The aspects of disciplining such as 'obedience', 'lying' and 'persistence of negative behaviour' showed similar patterns of responses by both the groups. (2) For the child's disobedience, EMs used 'spanking' relatively more frequently, whereas UEMs usually deprived the child from something desired. (3) EMs usually demanded very high level of discipline in their children as compared to their counterparts. Also, they reported relatively higher level

of discipline in their children than UEMs. (4) To develop good or positive habits in their children UEMs usually cited examples of neighbours whereas EMs illustrated more examples of ideals and sometimes of neighbours. (5) The UEMs mostly used the strategies of 'explaining' whereas EMs used 'scolding' and sometimes also fulfilled child's wish on condition. (6) A large number of UEMs showed relatively greater consistency in their 'reaction to child's negative behaviour' whereas EMs reported that they could not 'maintain consistency to a greater extent', they usually responded according to the demands of the situation. (7) Both employed as well as unemployed mothers used mild disciplinary techniques to control the negative behaviour of their children. [1030]

PANDYA, RAMESHWARI AND BORA, SARASWATI. 1997. **A study of factors causing school drop-outs: A survey report.** *Journal of Indian Education*, Vol. XXIII(3), 32-37.

Problem: It is an attempt to study the problems of drop-out in the municipal schools of Baroda.

Objective: To study the factors responsible for drop-out in the selected municipal schools of Falehgunj area of Baroda City.

Methodology: One hundred drop-outs during the academic session 1994-95, 50 parents, and 25 teachers were taken as sample of the study. Interview Schedule and a Check-list was used for data collection. Data were qualitatively analyzed.

Major Findings: (1) Among the school drop-outs, 57% of the respondents were female and 43% of the respondents were male. (2) A higher percentage of non Hindi respondents dropped out of school in comparison to Hindu respondents. (3) A higher percentage of the respondents dropped out from the school in Standards III-IV, and VI-VII in comparison to Standard V. (4) A very high majority of the respondents had both the parents living in the family. (5) The drop-outs lived in nuclear families. (6) Percentage of respondents from the lower income group was higher in comparison to the middle and higher income groups. (7) Poverty, unhealthy home environment and lack of parental support for the child's education were

the main home related causes for school drop-out. (8) Major reason for dropping out of school was the "boring teaching style" followed by reasons like physical punishment given by teacher, fear of failure in the school, lack of interest in studies and inability to follow classroom instruction. (9) Lack of facilities like toilet and drinking water was reported by some of the drop-out students as the reasons for dropping from the school. [1069]

RAJALAKSHMI, S. 1997. **Impact of education on conservation of household resources by rural families.** Ph.D., Home.Sc. Avinashilingam Institute for Home Science and Higher Education for Women. Guide: Prof. N.S. Narayanaswamy.

Problem: The present study attempts to assess the impact of the action programme to propagate the science and technology to a selected band of rural homemakers in Coimbatore District.

Objectives: (i) To find out the existing patterns of rural household practices with regard to the use of low-cost household technologies, (ii) to identify various household technologies appropriate to the rural areas with regard to conservation of resources in accordance with the socio-economic condition of the locality, (iii) to introduce selected low-cost household technologies to the rural homemakers and to motivate them to practise these technologies in their homes to save time, fuel and money, and (iv) to evaluate the impact of the introduction of low-cost household technologies on the rural homemakers.

Methodology: The sample comprised 300 homemakers who were selected by random sampling method from three villages. An Interview Schedule was used as a tool. Data were analysed using percentages.

Major Findings: (1) Forty two per cent of homemakers were illiterates. A majority of the families belonged to nuclear families and 60% belonged to medium size and there were 10% belonging to large families. 65% of the homemakers had owned houses. (2) The average monthly income of the selected families was Rs. 2389/- (3) Only 31% of the sample had known about the smokeless *chulah*, but after imparting education, a large majority of

them became aware of the smokeless *chulah*, kitchen gardening, mud water filter, and hay box. (4) A majority of homemakers who were given education on low-cost technologies adopted the practice of raising kitchen gardens in their yards, besides adopting smokeless *chulah*, hay box, bio-gas and soak pit. (5) A majority of them stated that the time so conserved as a result of adopting new household technologies provided mental rest and satisfaction. (6) After imparting education, it was found that 75% of families had developed the habit of planning their budget by keeping daily accounts. (7) After imparting education homemakers were spending only 38% for food as compared to 48% before. [0995]

HISTORY OF EDUCATION

BHARALI, LEENA DUTTA. 1997. **History of higher secondary education in modern Assam (1968-1990) — A perspective.** Ph.D., Hist. Gauhati Univ. Guide: Dr. Bharati Baruah.

Problem: The focus of the present study is on studying the historical development of higher secondary education in modern Assam covering 1968-1990.

Objectives: (i) To identify vital problems in higher secondary education such as structure, administration and organisation, examination and evaluation, medium of instruction, professional requirement, diversification, etc., and (ii) to identify the problems relating to infrastructural facilities, planning and institutionalisation.

Methodology: The survey method was employed to study the historical aspects of the past and present status of higher secondary education; physical facilities available, academic and vocational status maintained, language implications, medium of instructions, achievements and progress, utilization of curriculum and syllabus contents and its effectiveness, administrative status, professional requirements and its shortfall and future demands, etc. Since the study is a historical one, the information on policy formulations in the period of study both at the national as well as the state level, the background study, financial implications both at central and state level, constitutional

provisions, educational reforms and readjustments, etc., were collected from books, journals, reports, circulars and records of connected departments, organisations and offices at various levels.

Major Findings: (1) The logical setting of higher secondary education was yet to be decided and implemented. (2) The curriculum for higher secondary education was rigid and not fitted in different situations prevailed in different environments. (3) The vocational bias so far stressed and implemented was more on theory than on practice. (4) The existing system of examination was not sound and needed to be transformed to effect better quality and standard of education. (5) Many items of educational policy both at national as well as state level were not implemented in all seriousness causing failure of objectives. (6) The educational planning so far made and implemented failed to incorporate the factors influencing development of educational system with its objectives such as social demand, economic and political needs, etc. (7) The higher secondary schools of Assam were being run with poor facilities of building, equipment and trained personnel. (8) The present administrative system was not so effective and needed to be reexamined and reconstructed. (9) Sufficient efforts were not made by the state government to train teachers of higher secondary education on the new system of teaching, evaluation and administration. [0956]

SRIVASTAVA, MONA SEDWAL. 1998. **A study of the growth and development of university education in India.** Ph.D., Edu. Jawaharlal Nehru Univ. Guide: Prof. S.C. Ghosh.

Problem: The study centers around the development of university education in India from 1920-1947.

Objective: To analyse the historical and chronological developments of the university education in relation to the changing socio-political situations.

Methodology: Data were mainly collected from printed official reports and surveys. In analysing the development of higher education in India the methodology adopted was obviously historical and the problem is looked at from the point of view of relevant social science

disciplines and there is an attempt to write it in the light of new history of education that has emerged in the west.

Major Outcome: The university system was strongly influenced by the British model, but by 1925, Indian higher education began to change from a system which served almost exclusively as an adjunct of the British administration network, to an educational apparatus at least in part devoted to Indian national development, following the establishment of Inter-University Board in 1925. [1101]

ECONOMICS OF EDUCATION

SRINIVASAN, R. 1992. **Personal cost of engineering (first degree) education.** *University News, Monday, June 29.*

Problem: Present study attempts to work out the total cost of all the 3 types of institutions—government, aided and self-financing engineering institutions in Tamil Nadu.

Objectives: (i) To estimate the private cost of engineering education for the three types of institutions, and (ii) to find out the significant differences, if any, in the estimates among the institutions.

Methodology: A questionnaire to elicit the data was circulated to a total of 321 students from one government, one aided and one self-financing engineering college in the State of Tamil Nadu.

Major Findings: (1) The average personal cost of first degree education in engineering computed on the basis of information received from the students worked out to be Rs. 2,418.85 in government colleges; Rs. 3,072.15 in aided institutions and Rs. 6,414.10 in self-financing colleges per year. (2) The hostel expenses worked out to be Rs. 389.20; Rs. 390.90 and Rs. 402.25 in these three types of institutions respectively. (3) The glaring differences in the total fees and other expenses incurred by them indicated that self-financing colleges are highly expensive. (4) Average annual cost were not significantly different between government and aided institutions, but the self-financing and other two types of institutions showed a significant difference. [1014]

PSYCHOLOGY OF EDUCATION

AJITHA, NAYAR, K. 1998. **Goal perception of secondary school children of Kerala — A multinomial logit analysis.** *Perspectives in Education*, Vol. 14(2), 97-104.

Problem: This study attempts to analyze the underlying relationship between goal perception and variables like superstitious beliefs, delayed gratification, socio-economic status, locale, family type, type of school and occupational status of mother.

Objective: To explore the relationship between goal perception (GP) and variables like superstitious beliefs, delayed gratification, socio-economic status, locale, family type, type of educational institution and occupational status of mother.

Methodology : The sample comprised 240 secondary school children of Kerala, selected on the basis of stratified random sampling technique. The tools used were Goal Perception Scale, Delayed Gratification Scale, Superstitious Beliefs Scale and general data sheet. The data were analysed using a multinomial logit model.

Major Findings: (1) Positive and significant relationship was found between goal perception and delayed gratification. (2) Students possessing high level of GP had low level of superstition. (3) A majority of the private school students were found to have a higher level of GP than students in government schools. (4) A positive relationship was found between occupational status of mother and nuclear family for the high GP group. (5) The study found an inverse relationship between superstitious beliefs and family type. [0991]

BHARGAVA, ANIL AND QURESHI, ANJUM NASEER. 1998. **Sense of humour among student leaders.** *Indian Journal of Psychometry and Education*, Vol. 29(1), 17-20.

Problem: It is an attempt to study the sense of humour among student leaders.

Objectives: (i) To study the significant differences on sense of humour among the types of leaders, and (ii) to study the sense of humour among male and female leaders.

Methodology: Twenty thousand students studying at undergraduate and post graduate levels in Rajasthan were surveyed so as to select leaders for cultural activities, sports and student unions. The leaders were identified using observation and interview method. Muthayya's Humour Test was administered on the leaders after their selection. The collected data were subjected to mean, SD and 't'-test.

Major Finding: No significant difference was found among three types of leaders—union, cultural, and sports with reference to sense of humour. [1117]

CHATURVEDI, SHOBHA. 1996. **A study of adolescents' perception of maternal role of professional and non-professional mothers in relation to their level of aspiration and academic achievement.** Ph.D., Edu. Avadh Univ. Guide: Prof. A.K. Singh.

Problem: The study focuses on the adolescents' perception of maternal role and its effect on their level of aspiration and academic achievement. This is also expected to help the professional and non-professional mothers to deal and guide their adolescents.

Objectives: (i) To know the adolescents' perception of maternal role, (ii) to identify the relationship among perception of maternal role, academic achievement and level of aspiration, (iii) to identify the relationship between level of aspiration and academic achievement, (iv) to identify the difference in the perception, academic achievement, level of aspiration of adolescents of professional and non professional mothers, and (v) to identify the difference in the perception, academic achievement, level of aspiration of adolescent boys and girls.

Methodology: The sample comprised 1600 students of selected main English medium schools of Kanpur City. The sample represented the U.P. Board as well as I.C.S.E. Board. The tools used were Children's Report of Parental Behaviour Inventory by Uma Saxena and N.K. Saxena, Level of Aspiration Coding Test by Ghazala A. Ansari and Anwar Ansari, and academic achievement scores collected from school records. The collected data were treated with mean, SD, CR-value, correlation and analysis of variance.

Major Findings: (1) Perception of maternal role was significantly related to academic achievement. (2) Perception of maternal role was not related to level of aspiration. (3) Academic achievement was not related to level of aspiration. (4) Significant difference was found in perception, academic achievement, level of aspiration among boys and girls. (5) Highly significant difference was found in perception, academic achievement, level of aspiration among adolescents of professional and non-professional mothers. [1081]

LAKSHMIKANTH, N. 1998. **Psycho-social correlates of social problem-solving skills among preadolescents.** Ph.D., Psy. Bangalore Univ. Guide: Dr. Achala Umapathy.

Problem: It attempts to study the nature and correlates of social problem-solving skills (SPSS) among preadolescents.

Objectives: (i) To identify the existing social problems among preadolescents and the strategies used in solving them, (ii) to study the variables related to social problem-solving skills, and (iii) to evaluate the effect of a psychological intervention based on social problem-solving skills training, in enhancing social adjustment of children and related variables.

Methodology: The sample was drawn from five English medium co-educational schools in Bangalore City. The sample size varied in three phases of the study. Sample in the first phase consisted of 30 students of VI and VII Standards, 10 teachers and 10 parents based on incidental sampling from five different schools. In the second phase, 340 children of VI and VII Standards of three schools were drawn from among the schools based on their co-operation and in the third phase, among 20 volunteers from one of the schools, 10 were randomly assigned to experimental group and 10 served as control group subjects. Tools used to collect the data were Information Schedule, Preadolescent Adjustment Scale, State-Trait Anxiety Inventory, What I am Like Scale, Aggression Questionnaire, Test Battery on Moral Development, Social Problem Solving Skills Questionnaire and a tool of Group Social Problem-Solving Assessment. The collected data were treated with mean, SD, correlation and ANOVA.

Major Findings: (1) A significant positive correlation was found between school marks and all the sub-tests of moral development with the components of SPSS. Aggression and Anxiety were found to have a negative correlation with the components of SPSS. (2) Girls showed greater appreciation of their behavioral conduct and greater responsibility on moral development scale, whereas boys were more anxious and they could foresee the negative consequences of situations. (3) The younger group showed better school adjustment and were more appreciative of their social acceptance, physical appearance and behavioural conduct on self-concept as compared to the older group. (4) A significant score difference was found among the only child and the last born on interpersonal sensitivity and problem analysis and action. (5) Interaction effects of birth order and SPSS level were not found to be significant on any of the variables. [0976]

MISHRA, JAYASMITA. 1998. **Learning styles in relation to information processing modes and multiple talents.** *Psycho-lingua*, Vol.XXVIII(1), 7-18.

Problem: The present study is an attempt to investigate the learning style patterns, information processing modes and multi talent characteristics of university students, and to determine the effect of gender as well as the influence of concerned disciplines on the above mentioned variables.

Objectives: (i) To explore various elements of learning styles among university students, (ii) to determine the learning styles that characterise the students displaying different modes of information processing and possessing various multiple talents, and (iii) to study the influence of gender and types of faculties of different disciplines to which the students belong.

Methodology: Sample comprised 434 post graduate students belonging to the department of Humanities, Commerce, Science, Fine arts and management studies from Delhi University. The tools used were Learning Style Inventory by David Kolb, Form C of 'Your Style of Learning and Thinking' by Torrance and Reynolds, and Khatena Morse Multitalent Perception

Inventory. Collected data were analysed with the help of mean, SD, 't'-test, chi-square and analysis of variance.

Major Findings: (1) University students differed in their learning style pattern and modes of information processing ways in terms of their gender as well as the type of concerned disciplines to which they belonged. (2) University students displayed multi talent characteristics as indicated from their "Versatility" as an index of multi talent perception. Gender, however had no influence on this variable, but the type of faculty to which they belonged seemed to have an effect on the versatility dimension of the students. [1037]

PANCHANATHAM, N.; SURESH, V. AND AMALOR, D. 1998. **Achievement-motivation and quality decision making.** *The Indian Journal of Technical Education*, Vol.XXI(2), 30-34.

Problem: The present study is an attempt to examine the relationship between the achievement-motivation (n ach) and quality decision making of MBA students.

Objective: To study whether there is any significant difference between high and low achievers in their decision making styles (vigilant and non vigilant styles).

Methodology: Ninety MBA students (70 males and 20 females) from Annamalai University formed the sample of the study. Their age ranged from 19 to 26 years. Tools used were Beena Shah's Achievement Motivation Scale and Flinders Decision-Making Questionnaire II by Mann. Collected data were treated with Pearson's Correlation Coefficients and one way ANOVA.

Major Findings: (1) Achievement-motivation was positively correlated with vigilant decisions and negatively correlated with non-vigilant decisions. (2) High achievers scored significantly high on vigilant style and scored significantly lower on all non-vigilant styles. On the other hand, low achievers scored significantly lower on vigilant styles and scored significantly higher on all non-vigilant styles. (3) Individuals with relatively high level of n ach were more often found to make quality decisions and individuals with low n ach were found to make defective

decisions. (4) The results indicated that among the students, only vocational achievement and skill orientations contributed to vigilant tendency, but not the need for social and academic achievements. [1045]

PRABHAKAR, REKHA. 1998. **Effect of affective tone of words on the imaginative contents of thought.** *Psycho-Lingua*, Vol.XXVIII(2), 117-119.

Problem: It attempts to study the effect of words with specific affective quality on the imaginative contents of thought.

Objectives: (i) To study the effect of words with positive affective tone on imaginative contents of thought as compared to the words with neutral tone, and (ii) to study the effect of words with negative affective tone on imaginative contents of thought as compared to the words with neutral tone.

Methodology: The sample comprised 21 subjects of Standard X, the age ranging between 15-17 years and were divided into three groups. Three lists of words with 15 words in each list were used as tools. Collected data were treated with mean, SD and 't'-test.

Major Findings: (1) Positive word group had reflected higher positive affective tone as compared to the neutral word group. (2) Negative word group reflected higher negative affected tone. (3) The effect of negative words was more than the effect of positive words when both were compared with the neutral words. [1042]

ROUT, AKSHAYA K. AND PAL, GOBINDA C. 1993. **Perception of fairness and students' satisfaction: A study of levels of education and curriculum.** *Journal of Indian Education*, Vol.XIX(1), 42-46.

Problem: Present study is an attempt to examine the effects of levels of education and curriculum on students' perception of fairness and academic satisfaction.

Objectives: (i) To study the effects of levels of education and curriculum on perception of fairness and students' satisfaction, and (ii) to study the relationship between perception of fairness and students' satisfaction.

Methodology: Sample comprised 240 arts and science students from one Central School and one Central University from each of the three levels viz., under graduation, graduation and post-graduation. Tools used were Students' Satisfaction Scale by Deepak and a scale to measure the perception of fairness by Khan. Data were analysed using mean, SD, 't'-test and correlation coefficients.

Major Findings: (1) Students differed significantly on the mean scores on perception of fairness. (2) The post-graduates had the highest mean scores both on perception of fairness and students' satisfaction whereas the under graduates had the lowest scores and the graduates in the middle. (3) While the mean difference between the under-graduates and graduates, and the under graduates and post graduates on students' satisfaction were highly significant, the mean difference between the graduates and postgraduates was marginally significant. (4) The mean differences between the arts and science students on perception of fairness and students' satisfaction were significant. (5) The perception of fairness and students' satisfaction had positive and significant correlations for the undergraduate arts and science students. For the graduates, correlation between perception of fairness and students' satisfaction was positive but not significant whereas for the postgraduates it was negative, not significant, and thus, not meaningful. [1076]

ROYCHAUDHURY, PAROMITA AND BASU, JAYANTI. 1998. **Parent-child relationship, school achievement and adjustment of adolescent boys.** *Journal of Personality and Clinical Studies*, Vol.XIV(1,2), 53-58.

Problem: It is an attempt to study the impact of parent-child relationship on the school achievement and adjustment of adolescent boys.

Objective: To determine the extent to which various aspects of parenting influence the school adjustment and achievement of adolescent boys when the effect of intelligence is partialled out.

Methodology: The sample consisted of 105 boys studying in Class VIII of two government schools of Calcutta. Their age ranged between 13 to 14 years. The tools used were Parent-Child Relationship Scale, Adjustment Inventory for School

Students, Culture-Fair Test, apart from Achievement and Information Schedule. Collected data were treated with mean, SD and Pearson's Product Moment Correlation Coefficients.

Major Findings: (1) Intelligence scores were highly related to achievement and moderately to emotional and social adjustment in school. But these were unrelated to educational adjustment and any of the parenting dimensions. (2) Partialling out the effect of intelligence did not alter much the nature of the relationship between parenting and adjustment in school. (3) Fathering seemed to have negligible impact in case of school adjustment. The style of mothering was, here, the most salient factor. [1049]

SAHOO, FAKIR M. AND BATRA, GAYATRI, 1997. **Self-efficacy and attributional styles in mastery-oriented and learned helpless students.** *Indian Educational Review*, Vol. XXXII(2), 92-103.

Problem: The study attempts to examine the relationship amongst the dimensions of self-efficacy, learned helplessness, and attributional styles among high school students.

Objective: To study the association among the constructs of learned helplessness, self-efficacy and attributional style.

Methodology: A total of 124 students were randomly sampled from Classes VIII, IX and XI from schools in Bhubaneswar. A 2x2 factorial design was adapted where boys and girls were separately categorized into two sub-groups on the basis of their helplessness scores. Tools used were Measures of Self-Efficacy developed by Wegner and adopted by Sahoo, Children's Helplessness Questionnaire developed by Sahoo and Children's Attributional Style Questionnaire developed by Seligman and adapted by Sahoo. The collected data were treated with ANOVA and correlation.

Major Findings: (1) Girls were found to be more helpless than boys. (2) Boys used greater stability attributions for explaining good events and girls employed greater stability attributions for bad events. (3) Boys demonstrated greater general self-efficacy. (4) Boys indicated greater globality attributions than girls for explaining negative events. (5) Mastery-oriented students showed greater stability (for Positive events) and

greater domain-specific self-efficacy than did helpless participants. [1063]

SAIR, HARCHARAN DASS. 1998. **A study of some selected socio-personal and psychological traits of academically gifted senior secondary school students.** Ph.D., Edu. *Punjab Univ.* Guide: Dr (Mrs) Meenakshi.

Problem: It attempts to study the personal background, adjustment, interests, intelligence and socio-economic status of the intellectually superior children.

Objectives: (i) To identify the academically gifted boys and girls at the 10+1 stage of school education, (ii) to prepare profiles on personal, social and psychological variables for boys and girls separately, and (iii) to make recommendations towards dealing with these children in educational and personal matters.

Methodology: The population comprised 10+1 students who passed the matriculation exam conducted by Punjab School Education Board in March 1995 and got 70% or more marks. 100 students each from Jalandhar, Patiala and Ropar were included in the sample. The cluster sampling technique was employed by investigator to collect information from the academically gifted students. The tools used in the study were Socio-Personal Scale, Socio-Economic Status Scale of Meenakshi, Sharma's General Mental Ability Test, Asthana's Adjustment Inventory, and R.P. Singh's Interest Record. Collected data were treated with t-test, chi-square test and percentages.

Major Findings: (1) The family size had a significant effect on academic achievement. Smaller the family greater the chance of academic excellence. (2) Both academically gifted boys and girls had identical reading interests in reading newspaper. These children had also not shown much interest in sports. Their participation upto district level was good but went on decreasing at the upper levels. (3) The academically gifted children both boys and girls were very choosy with respect to their hobbies. It showed that their interests were heterogeneous rather than homogeneous. (4) Gifted children had cordial relations with their friends. But significant difference was seen between the gifted boys and girls. The gifted children did not lose temper

easily. But they were not free from this emotion. They are very co-operative in nature and were helpful to the neighbors and others in difficulties. Gifted girls were found to be more helpful to the parents in domestic affairs where as more gifted boys than girls participated in taking family decisions. More boys than girls avoided social offenses. (5) The academically gifted boys and girls came from all types of home backgrounds. (6) No significant difference was found between gifted boys and girls on socio-economic status. (7) Gifted boys and girls were not found significantly different in I.Q. scores. (8) Gifted boys were found to be more adjusted than the gifted girls. (9) The gifted boys and girls had identical interests. [1052]

SHARMA, L. AND AGARWAL, S. 1998. **A comparative study of reading-writing readiness among children attending ICDS and Non-ICDS centres.** *Indian Journal of Psychometry and Education*, Vol.29(2), 95-100.

Problem: The present study attempts to determine the reading-writing readiness among children attending ICDS and non-ICDS centres.

Objectives: (i) To determine the reading-writing skills of ICDS and non-ICDS children, and (ii) to find out the differences in reading-writing skills among ICDS and non-ICDS children.

Methodology: The sample comprised 100 children, 50 (25 girls and 25 boys) from Anganwadi centers included in the ICDS project and 50 (25 girls and 25 boys) from schools selected randomly, between the age-groups of 5-6 years. The tool used was reading-writing readiness test developed by Narendra Singh. The collected data were treated with percentage, mean, SD, and 't' test.

Major Findings: (1) There was a significant difference in reading-writing skills of ICDS and non-ICDS groups of children. (2) There was a significant difference in reading-writing skills of boys and girls in non-ICDS group, whereas no sex difference was observed in reading-writing skills among ICDS group of children. [1112]

SRIVASTAVA, R.K. 1998. **A study of self-concept of high school pupils in relation to their sociometric status.** *Indian Journal of Psychometry and Education*, Vol.29(1), 49-52.

Problem: The present study attempts to find out the influence of pupils' self-control level on their sociometric status.

Objectives: (i) To assess the sociometric status of high school rural pupils, (ii) to measure the self-concept level of these pupils, and (iii) to find out the effect of pupils' self-concept level on their sociometric position.

Methodology: The sample comprised 150 pupils of Class X covering equal number of boys and girls, who were selected randomly from the Government Inter College, Nagni and Government Girls Inter College, Chamba situated in the rural locality of Tehri-Garhwal District (U.P.). The tools used to collect the data were *Swatva Bodh Parikshan* (a test of self-concept) developed and standardised by Sherry, Verma and Goswami, and Sociometric Test prepared by the investigator. The obtained data were subjected to coefficient of correlation and 't'-test.

Major Findings: (1) Self-concept and sociometric status were not significantly related. (2) There existed a significant mean difference between the self-concept level of popular and unpopular pupils. (3) The self-concept scores of the pupils may be used in predicting the popularity and unpopularity of the pupils in the sociometric position of their class-group. [1120]

TANDON, UMA. 1994. **A comparative study of self-concept among high and normal IQ adolescents in relation to creativity, SES and academic achievement.** Ph.D., Edu. Kanpur Univ. Guide: Dr. J.S. Gupta.

Problem: The study centered upon finding out the relationship of self-concept to intelligence, creativity, SES and academic achievement.

Objectives: (i) To determine the extent of relationship of self-concept with intelligence, creativity, SES and academic achievement, and (ii) to determine relationship of self-concept with intelligence, creativity, SES and academic achievement.

Methodology: The sample comprised 200 boys and 200 girls who belonged to high and low SES and high and normal I.Q. They were students studying in Class XI in U.P. Board and ICSE stream representing all main areas of Kanpur City. The tools used included Self-Concept

Questionnaire of R. R. Srivastava, Group Test of General Mental Ability by S. Jalota, Creativity Test by Alokita Roy and Socio-Economic Status Scale by the researcher. The academic achievement scores were also used. The collected data were treated using ANOVA, 't'-test and Fisher's Z test.

Major Findings: (1) Self concept was found to be significantly related to intelligence and creativity. (2) Self concept was found to be significantly related with academic achievement only under uncontrolled conditions, but uncorrelated under controlled conditions. (3) Self concept was not related with SES. (4) Creativity was found to be significantly correlated with intelligence and academic achievement. (5) The effect of sex was found to be highly significant between creativity and intelligence and creativity and academic achievement and boys were found to be more intensely related than girls. [1036]

✓ VERMA, SUMAN AND LARSON, REED. 1999. **Are adolescents more emotional? A study of the daily emotions of middle class Indian adolescents.** *Psychology and Developing Societies*, Vol.11(2), 179-194.

Problem: It attempts to study the daily emotions of middle class Indian adolescents.

Objectives: (i) To study whether Indian middle class adolescents experience greater emotional swings than their parents, (ii) to study the differences in adolescents' daily emotions, (iii) to evaluate the relationship of adolescents' extreme emotions to possible causal factors, such as stress and involvement with peers, and (iv) to evaluate the relationship of adolescents' emotions to their psychological adjustment.

Methodology: The sample comprised 100 VIII Graders and their parents from urban middle class families. Tools used to collect the data were Parental Acceptance Scale, Family Cohesion Scale, Stress Management Scale, Child Behaviour Checklist, a measure of academic anxiety and a scale of Clinical Depression. Besides this, Experience Sampling Method (ESM) was used to assess the emotions of adolescents. The data were treated with mean, SD, t-test, chi-square test and correlations.

Major Findings: (1) Out of the fourteen scales on

the ESM self-report form, girls reported significantly more positive average states only on the scale friendly-to-angry than did boys. (2) Although Indian middle class adolescents' average emotions and activation states differed little from those of their parents, they experienced wider emotional swings with more negative and extreme positive states. (3) Negative states often stemmed from the stress of school, while positive states were more often related to the joys of peer association and leisure activities. (4) Family, peer, and school variables were primarily related to the balance of positive and negative affect rather than to emotional variability. (5) Adolescents who experienced more negative emotions were found to manifest higher rates of psychological problems. [1116]

MENTAL HEALTH

ANIS, AHIMAD AND SEN, A.K. 1998. **Prevalence of drug abuse among students of Jamia Millia Islamia : A survey report.** *Disabilities and Impairments*, Vol.12(1), 31-39.

Problem: The present study has aimed at investigating the prevalence rate of drug abuse covering soft and hard drugs among the university students.

Objective: To find out the prevalence rate of drug abuse among the students of Jamia Millia Islamia.

Methodology: The sample consisted of 200 students staying in hostels and localities of Jamia Millia Islamia, New Delhi. They ranged in their age between 17 years to 27 years, who were studying in General Stream, Engineering Stream and Engineering Diploma Stream. The researchers used a questionnaire and a personal information schedule as tools. The collected data were qualitatively analysed.

Major Findings: (1) Cigarette/Bidi smoking was seen among 36% of the sample followed by alcohol, cannabis, tranquilisers and sedatives. (2) The parents and family members of the addicts were also found to be addicts of tobacco, and alcohol. [1109]

GUPTA, VANDANA AND SANSANWAL, D.N. 1996. **Self-concept enhancement programme of under**

graduate female students. *Journal of Higher Education*, Vol.XIX(4), 519-527.

Problem: The present study was planned to develop programmes for facilitating changes in the self-concept of the under graduate female students.

Objective: To compare adjusted mean self-concept scores of students belonging to self-concept enhancement programme (SCEP) with those belonging to conventional programme by considering adjustment, verbal intelligence, non-verbal intelligence and pretest scores as covariates.

Methodology: The sample comprised 154 under-graduate second year and third year female students of Home Science and Arts faculties of Indore. The sample was divided randomly into two groups, namely, control (78) and experimental group (76). Their medium of instruction was Hindi and age ranged from 17 to 23 years. The tools used to collect the data were Self-Concept List by Deo, Adjustment Inventory for College Students by Sinha and Singh, Verbal Intelligence Test by Ojha and Chaudhary and Raven's Standard Progressive Matrices Test. Data were treated with ANCOVA.

Major Findings: (1) The SCEP treatment given to the experimental group to enhance the self-concept of students proved to be very effective as compared to conventional programme of control group. (2) Results showed that adjusted mean aesthetic positive, character positive, intellectual positive, emotional positive, social positive and overall positive self-concept of experimental group differed significantly from corresponding self-concept scores of control group by considering adjustment, verbal intelligence, non-verbal intelligence and pre-test scores as covariates. (3) Significant enhancement in positive aspects of aesthetic, character, emotional, intellectual and social dimensions of self-concept in turn enlarged the overall positive self-concept of students of experimental group. (4) Character negative, emotional negative, intellectual negative, social negative and overall negative self-concept of students belonging to SCEP were decreased in comparison to students of conventional programme. [1061]

BATHAK, R.P. AND RAI, V.K. 1993. Mental health of higher secondary students in relation to socio-economic status. *Journal of Indian Education*, Vol.XVIII(5), 52-56.

Problem: The present study was designed to study the mental health of higher secondary students in relation to SES.

Objectives: (i) To study the effect of socio-economic status on mental health, (ii) to study the effect of sex difference on mental health, when socio-economic status is controlled, (iii) to compare the mental health of urban and rural students, when socio-economic status is controlled, (iv) to compare the mental health of science and arts students, when socio-economic status is controlled, and (v) to compare the mental health of students across grade levels, when socio-economic status is controlled.

Methodology: Sample comprised 501 students of Classes IX-XII drawn from two urban and two rural higher secondary schools of Azamgarh District, UP. Mental Health Scale by Anand and Socio-economic Status Index by Bhattacharya were administered on subjects. Collected data were treated with mean, SD, ANOVA and ANCOVA.

Major Findings: (1) The present study revealed that the mental health of low socio-economic status students was lower than that of the students of higher socio-economic status. (2) Female students were mentally healthier than male students, when SES was controlled. (3) Urban and rural students did not differ significantly on mental health, when SES was controlled. (4) Science students were mentally healthier than arts students, when SES was controlled. [1019]

SHARMA, R.D. 1995. Influence of recent life experience on mental health of school teachers. *Indian Educational Review*, Vol. XXX(2), 102-109.

Problem: Present study is an attempt to examine the influence of recent life experience on mental health of school teachers.

Objective: To study the impact of life events on mental health of male and female teachers.

Methodology: Eighty male and female school teachers working in the schools at Srinagar were selected for this study. Paliwal Recent Life Events Questionnaire and Langner-Paliwal Scale for measuring Mental Health were administered on the subjects. The collected data were treated with mean, SD, correlation, 't'-test and value loadings.

Major Findings: (1) Psycho-physical strain was positively correlated with recent life experience and male teachers were more influenced than female teachers. (2) Teachers considered that major change in number of family get-together, major change in responsibility at work, trouble with the neighbour, change in residence, major change in sleeping habits, revision of personal habits, major change in number of arguments with spouse, trouble with boss, major change in eating habits, major change in health and behaviour of a family member, major change in financial state, sexual relation of wife or husband with other man or woman, major change in relation with the family members, death of close family member, increase or decrease in taking toxicated things were the main factors which caused psycho-physical strain in the male and female teachers. [1022]

TOMAR, VINEETA. 1999. **Aggression: As a function of humour, economic status and gender.** *Journal of Personality and Clinical Studies*, Vol. 15(1-2), 52-55.

Problem: The present investigation aims at studying the effect of humour, economic status and gender on the need of aggression among adolescents.

Objective: To study the effect of humour, economic status and gender on the need of aggression among adolescents.

Methodology: The study is of ex-post facto design, conducted on 40 adolescents studying in various colleges of Meerut City. The tools used included Humour Test by B.C. Muthayya and Thematic Apperception Test (Indian adaptation). The collected data were treated using Chi-Square Test.

Major Findings: (1) With humour being constant, aggression need was found to be more in boys from low economic status. (2) Among boys, with

economic status being constant, low humour group had higher aggression need. (3) With humour and economic status being constant, gender differences were found on aggression need, more pronounced in females. (4) When economic status was not controlled, there was some indication that high humour girls were found to be possessing greater aggression need than high humour boys. [1115]

COGNITIVE PROCESSES

DEVI, KALYANI T. 1997. **Influence of type of school on cognitive styles.** *Experiments in Education*, Vol. XXV(9), 172-175.

Problem: The study is designed to examine the influence of type of school on cognitive styles of children.

Objectives: (i) To study the influence of type of school on field dependence/independence, and (ii) to find out the influence of type of school on reflectivity/impulsivity styles.

Methodology: The sample comprised 240 students studying in VIII, IX and X Standards of two private and two quasi-government schools of Tirupati. The tools used to collect the data were Group Embedded Figure Test (GEFT) developed by Witkin *et al.*, and Matching Familiar Figure Test (MFFT) developed by Kalyani Devi. The collected data were treated with mean, SD and 't'-test.

Major Findings: (1) Private school children tended to be more field-independent than quasi-government school children. (2) Private school children were reflective and quasi-government school children were more impulsive. [1144]

MATHEW, ANNIE AND BHOGLE, SUDHA. 1995. **Factors influencing efficient problem-solving.** *The Creative Psychologist*, Vol. 7(1&2), 11-16.

Problem: The present study attempts to determine different variables that can discriminate between successful and unsuccessful problem solvers.

Objective: To study the factors influencing efficient problem solving among engineering students.

Methodology: The sample consisted of 150 engineering students from three specialization, viz., computer science, civil engineering and architecture. The tools used to collect the data were a set of two problems (Tower of Hanoi and cryptarithmic problem), Wagner Preference Inventory Form II, Eysenck Personality Inventory-Q and Problem-Solving Inventory of Heppner and Peterson. The collected data were subjected to discriminant analysis.

Major Finding: Type of specialization, confidence in problem-solving, low neuroticism, and left-verbal cerebral dominance promoted efficient problem-solving. [1133]

MCLAREN, INGRID A.M. 1996. **Sex differences in field independence and cognitive ability among Jamaican students.** *Perspectives in Education*, Vol. 12(4), 231-236.

Problem: It attempts to study gender difference in field independence and cognitive ability among Jamaican students.

Objective: To study gender differences in field independence, spatial ability, abstract reasoning, and verbal ability among Jamaican students.

Methodology: The sample comprised 309 university undergraduate students pursuing the level I English language course UC 120. The tools used to collect the data were Group Embedded Figures Test, Spatial Ability Test and Abstract Reasoning Test of Differential Aptitude Test (DAT), and Verbal Ability Test which consisted of two sections, namely, vocabulary section developed by the researcher and comprehension section adapted from the critical reasoning component of the Graduate Management Admission Test Manual (GMAT). The collected data were treated with mean, standard deviation and 't'-test.

Major Findings: (1) Male were significantly more field independent than female subjects. (2) In the area of spatial ability and abstract reasoning male performed significantly superior to that of female. (3) There was no significant difference in the performance of both sexes on the measure of verbal ability. [1140]

MUKHERJEE, JAYASHREE. 1994. **Learning from lectures : A study of cognitive demands and learning strategies at the tertiary level.** Ph.D., Eng. *Central Institute of English and Foreign Languages*. Guide : Prof. Jacob Tharu.

Problem: It attempts to study the cognitive demands and learning strategies of learners at the tertiary level.

Objectives: (i) To identify the cognitive learning strategies that underlie effective learning from subject lectures, and (ii) to work out means of developing these strategies in learners.

Methodology: The sample comprised 96 students of final year B.A. classes and 18 teachers, 6 in each of the three selected subjects i.e., English Literature, History and Economics. The researcher conducted two surveys in the study. The tools used were a schedule for classroom observation, Questionnaire for the teacher and students and a scheme for the analysis of student's notes. Means, SDs and correlation coefficients were computed for analysing the data. Qualitative analysis was also done for analysing the notes of students.

Major Findings: (1) Survey-1 showed no evidence of comprehension on the part of the students. It also revealed absence of any systematic note-taking behaviour in students. (2) Survey-2 focused on the following facts—(a) Students had problems in comprehending lectures and taking down notes. (b) Students were not aware of the use of cognitive learning strategies. (c) Taking notes was an activity used mainly for storage purposes and not as a tool for learning. (d) Students' notes showed lack of grasp of the structure of the topic. The results of Survey-2 gave evidence of the need for training mainly through students' performance in comprehension tests and classroom activities. [1126]

PACHAURY, A.C. 1993. **Assessment of the cognitive development of Gond children and adolescents.** *Journal of Indian Education*, Vol. XVIII(6), 42-45.

Problem: Present study is an attempt to ascertain the cognitive development of Gond children and adolescents.

Objective: To ascertain the level of cognitive development of the Gond children and adolescents measured by the conservation tasks of number, length, space, continuous and discontinuous quantities and class inclusion.

Methodology: Sample comprised 45 children out of which 24 were female and 21 were male in the age group of 7 to 16 drawn from a government middle school of Betul District of Madhya Pradesh. Data were collected through a structured interview schedule prepared by the investigator and were treated with percentages.

Major Findings: (1) Except the class inclusion task all the other conservations were mastered by the children around the age of seven years. (2) children in the age-group of 11-12 years had performed very poorly on all the tasks as compared to their younger as well as older peers. (3) Performance of the male subjects had been unusually poor compared to their female counterparts. [1005]

SAHNI, RENU. 1998. **Relationship between cognitive skills and performance in computer science.** *Psycho-Lingua*, Vol. XXVIII(2), 125-130.

Problem: This is an attempt to conduct a correlational study on students of senior secondary schools of Delhi, which identified some specific cognitive skills to be related to performance in computer science.

Objectives: (i) To study the relationship between performance in computer science and the seven cognitive skills, and (ii) to identify which combination tests would optimally predict performance in computer science.

Methodology: The sample comprised 391 students from a list of senior secondary schools of Delhi. The tests administered on the subjects were Algebra Problem Solving Test, Arithmetic Problem-Solving Test, Procedure Following Test, Direction Following Test, Logical Reasoning Test, Spatial Ability Test, and Verbal Reasoning Test. Collected data were treated with correlation and multiple linear regression analysis.

Major Finding: Variables which significantly contributed to the prediction of computer science performance were verbal reasoning, procedure following and direction following skills. [1043]

SOCIAL PROCESSES

RANI, SEEMA. 1997. **A study of perceived socio-political ecology as a factor of college teachers' militancy, morale and academic alienation.** Ph.D., Edu. Rohilkhand Univ. Guide: Dr. R.P. Bhatnagar.

Problem: The study centered upon the men and women college teachers' militancy, morale and academic alienation hypothesized to be the resultant of socio-political ecology as perceived by them.

Objectives: (i) To find out whether socio-political ecology was causally related to men and women college teachers' militancy, morale and academic alienation, and (ii) to find out how the men and women college teachers compared with each other on militancy, morale and academic alienation.

Methodology: The sample comprised 200 college teachers (150 men and 50 women) drawn from 11 (8 male and 3 female) colleges. Tools used to collect the data included Perceived Socio-Political Ecology Scale (PSPES), Test of College Teachers Morale (TCTM) and Teachers' Academic Alienation Scale (TASS). Data were analysed using mean, and non-parametric test of significance.

Major Findings: (1) The high PSPES group of men college teachers perceived socio-political ecology more negatively as compared to low PSPES group and was found to be more militant. (2) The morale of the high PSPES group of men college teachers was found to be lower than that of the low PSPES group. (3) As compared to the low PSPES group of men college teachers the high PSPES group was found to be more alienated academically. (4) In case of women college teachers the high PSPES group as compared to the low PSPES group was found to be more militant, more alienated and having lower level of morale. (5) Male college teachers as compared to female college teachers were found to be more militant. (6) Male college teachers had lower level of morale than that of the female college teachers. (7) Male college teachers were found to be more alienated academically as compared to women college teachers. [0954]

CREATIVITY

*KAUR, PARVEEN AND KHARB, DEEPAK. 1993. **Creativity in children: The impact of school and home environment.** *Journal of Indian Education*, Vol. XVIII(6), 46-49.

Problem: Present study is an attempt to explore the creative abilities in children brought up in differential home, school and socio-cultural environment.

Objective: To study the impact of school and home environment on creativity in children.

Methodology: Sample comprised 144 students with an equal number of boys and girls in the age group of 10 to 12 years from the schools of Hissar District. Baqer Mehdi's Test of Creative Thinking and Home Environment Inventory were administered on subjects. Collected data were treated with mean, 't'-ratio and correlation.

Major Findings: (1) Urban schools were better than rural schools in terms of physical facilities, school activities and teacher's behaviour. (2) Children of urban schools had scored higher on all the four aspects of creativity than their rural counterparts. (3) A significant positive correlation between creativity and home environment was found. (4) Significant and positive correlation existed between creativity and socio-economic status. [1006]

MATTOO, MOHAMMAD IQBAL. 1994. **Vocational interests, adjustment problems and scholastic achievement of high and low creative students.** *Indian Educational Review*, Vol. XXIX(1,2), 86-88.

Problem: It attempts to study the vocational interests, adjustment problems and scholastic achievement of high and low creative students.

Objectives: (i) To identify high and low creative students, (ii) to compare high and low creative students on their vocational interest, (iii) to compare high and low creative students on their level of adjustment, (iv) to compare high and low creative students on their scholastic achievements, (v) to find out the sex variation on vocational interests, adjustment problems and scholastic achievement in case of high cre-

ative students, and (vi) to find out the dominant factors of interest and adjustment of high and low creative students.

Methodology: One thousand students studying in Grade X, drawn randomly from high and higher secondary schools of Anantnag District of Kashmir, served as a sample for the present study. The students were in the age group of 16-17 years. Tools used included Baqer Mehdi's Verbal Test of Creative Thinking, Chatterji's Non-Language Preference Record, and Jameel Adjustment Inventory. Apart from that the scholastic achievement of each of the high and low creative students was assessed in terms of the aggregate marks he/she obtained in his/her previous two annual examinations. The collected data were treated with mean, SD, 't'-test and factor analysis.

Major Findings: (1) High and low creative students differed significantly in the interest areas, viz. fine arts, literary, scientific, technical and household; favouring the high creative group. On the other hand, low creative student in comparison to high creative students were found to possess significant differences in the interest areas of medicine, agriculture, crafts, and sport. (2) High and low creative groups did not differ significantly in the outdoor interest area. (3) High creative group in comparison to low creative group was found to be socially maladjusted, emotionally unstable and not satisfied with the household affairs but not on health adjustment. (4) High creative group was found academically bright as compared to low creative group. (5) High creative boys and girls were found to be significantly different in five interest, viz. fine arts, medical, outdoor, agriculture and sports. The mean differences in the first three areas favoured high creative boys and in the remaining two areas high creative girls were favoured. (6) Sex variation in the highly creative group with regard to social, emotional, home and financial adjustment could not be established. However, in the area of health adjustment, significant differences were found between the two groups. (7) No significant difference was found in the scholastic achievement of high creative boys and high creative girls. (8) Dominant vocational interests and adjustment areas for the high creative group were found to be different in comparison to low creative. [1017]

RAJAGOPALAN, MALATHI. 1998. **Creative talent in relation to convergent and divergent thinking.** *Perspectives in Education*, Vol. 14(2), 105-112.

Problem: This study attempts to understand the relationship between creative talent, convergent thinking and divergent thinking processes.

Objectives: (i) To find out whether creative talent has relationship with convergent and divergent thinking processes, (ii) to find out whether creative talent is related to achievement scores in the examination, (iii) to find out the relationship between different types of creative talents like aesthetic, cognitive, scientific and craft with convergent and divergent thinking processes as well as with achievement in the examination, (iv) to find out the important discriminating variables discriminating higher creative groups from lower creative groups, and (v) to compare the three groups; high IQ, high score in conventional test of creativity and high on creative talent on convergent, divergent thinking and achievement score.

Methodology: The sample of the study comprised 260 pupils of Class XI from various elective subject groups including both science and non-science students drawn from different schools of Madras. Tools used for this study were Personal Data Sheet and Test of Convergent Thinking and a Test of Divergent Thinking based on Guilford's Structure of Intellect. Collected data were treated with mean, SD, 't'-test, chi-square, multiple regression and coefficient of correlations.

Major Findings: (1) Creative talent was significantly related to both convergent and divergent thinking but its relationship to academic achievement was not significant. (2) Aesthetic creativity and scientific creative talent were significantly related to convergent and divergent thinking whereas cognitive creative talent and talent in craft were not significantly related to either of them. (3) Divergent thinking had greater weightage for aesthetic and scientific creativity in comparison to convergent thinking. (4) In a group of pupils whose IQ were more than 120, a highly significant relationship was found among the convergent and the divergent thinking and the achievement scores. A significant association between higher level intelligence (IQ more than 120) and creative talent

was also seen. This relationship and association was also true for the high scorers in creativity test. (5) The important discriminating variables discriminating higher creative groups from lower creative groups were aesthetic creativity, scientific creative talent, originality and fluency. [0992]

SUDHIR, M.A. AND KHIANGTE, VARPARI. 1997. **Personality and creativity among secondary school students: A Study in talent development.** *Indian Educational Review*, Vol. XXXII(2), 115-125.

Problem: This study investigated the relationship between creativity and personality characteristics of secondary school students.

Objectives: (i) To compare the personality characteristics of students with high and low creative thinking ability, and (ii) to examine the sex differences and locale differences in personality characteristics of the high creative students.

Methodology: The sample consisted of 700 students (335 boys and 365 girls) selected at random from Class X studying in 10 secondary schools in the state of Mizoram. The tools used were High School Personality Questionnaire of Cattell and Cattell and Creativity Test of Sudhir and Khiangte. Collected data were treated with mean, SD and 't'-test.

Major Findings: (1) The high creative students were found to be superior to the low creative students in abstract thinking. (2) Intelligence, sensitivity, independence, assertiveness and spontaneity had been observed as significant correlates of creativity. (3) High creative boys differed significantly from the high creative girls on personality factors A,B,C,D and Q4. (4) The rural high creative group when compared to the urban high creative group were found more intelligent, happy-go-lucky, out-going, self-sufficient and controlled. (5) A comparison of personality factors of the rural and urban high creative girls showed that high creative girls from urban areas turned out to be more intelligent, emotionally stable, conscientious and apprehensive than the high creative girls from rural background. (6) The rural high creative boys were proved to be outgoing, conscientious; tender-minded and self-sufficient as against their reserved, group-dependent and expedient urban counterparts. [1064]

CURRICULUM DEVELOPMENT

VAIJAYANTHI, R. 1997. **Curricular intervention to inculcate environmental awareness at primary level.** Ph.D, Edu. *Osmania Univ.* Guide: Prof. M.S. Ramamurthi.

Problem: The present study examines the curricular intervention for the growth of environmental awareness at the primary level.

Objectives: (i) To delineate the environmental deterioration, (ii) to prepare a list of possible improvable environmental deterioration, (iii) to list out the provision for creating awareness in the existing syllabus, and (iv) to develop learning materials to be suggested for curricular improvement.

Methodology: The sample comprised 90 boys and girls from an English medium school. They were equally divided into experimental and control group. Environmental studies books II of Classes III, IV and V were scrutinised. A questionnaire was developed to collect the data. The collected data were treated with percentages.

Major Finding: In every aspect, the experimental group showed greater awareness as compared to the controlled group. Though the textual matter studied by both the groups were same due to activities undertaken by the experimental group children, they showed considerable awareness about the environment. [0977]

PRE-PRIMARY EDUCATION

DUBEY, ARCHANA AND PANDA, SUNITA. 1993. **Developing story-telling ability among nursery student-teachers: Effectiveness of stimulus variation.** *Indian Educational Review*, Vol. XXVIII(1), 19-26.

Problem: The present study is an attempt to bridge the gap between stimulus variation skill, the extraversion dimension of personality and the story-telling ability.

Objectives: (i) To study the effectiveness of training strategy without the stimulus variation skill in developing story-telling ability of the nursery

teacher-training (NTT) students, (ii) to study the effectiveness of training strategy with the stimulus variation skill in developing story-telling ability of the NTT students, and (iii) to study the effectiveness of training strategy with and without the stimulus variation skill in developing story-telling ability of the NTT students, by considering personality (extraversion dimension) as covariate.

Methodology: The sample consisted of 21 student-teachers studying in NTT course in the school of education, Devi Ahilya Vishwavidyalaya, Indore. The tools used included the System for Observing Story-Telling Ability (SOSTA) prepared by the investigators and Hindi version of Maudsley's Personality Inventory (MPI) developed by Jalota and Kapoor. The data were analysed with the help of the correlated 't'-test and analysis of covariance.

Major Findings: (1) The means of the story-telling ability scores of the NTT students before and after the treatment when trained without the stimulus variation, were significantly different. The training produced significant effect on the story-telling ability. (2) The means of the story-telling ability scores of the NTT students before and after the treatment, when trained with the stimulus variation, were significantly different. The training produce significant effect on the story-telling ability. (3) The training of the story-telling ability with the stimulus variation skill was more effective than the training without the stimulus variation skill when personality scores were considered as covariate. [1059]

GOEL, SUSHIL KUMAR. 1996. **Effect of pre-school education on cognitive development of children.** *The Primary Teacher*, Vol.21(2), 30-34.

Problem: The present study attempts to assess the effect of pre-school education on cognitive development of children.

Objectives: (i) To explore the effect of age on cognitive abilities of primary school children irrespective of education background, and (ii) to see the effect of pre-school education on cognitive ability.

Methodology: The sample consisted of 100 children belonging to two age levels. The first group consisted of 50 children between 3 and 5 years

of age and the second group of 50 children between 6 and 8 years of age. Children of each age group were divided into two sub-groups on the basis of their pre-school experience. A questionnaire was administered to mothers of all the children. Further, Figure Copying Test, Raven's Coloured Progressive Matrices (RCPM), Forward Digit Span (FDS), tests of clustering and free recall were administered. Mean, SD and ANOVA were computed to analyse the data.

Major Findings: (1) Children belonging to the upper age group performed better than children belonging to the lower age group in the tests administered. Further, children with pre-school experience performed better than children without pre-school experience on different tests administered. (2) The children belonging to the upper age group performed significantly better than children belonging to the lower age group in the RCPM test irrespective of their educational background. (3) The children of upper age group performed significantly better than the children of lower age group in FDS test. (4) The children belonging to upper age group performed significantly better than the children belonging to the lower age group irrespective of their educational background. (5) The effects of age and pre-school experience on cognitive development were significant. (6) The children belonging to the upper age group performed significantly better than children belonging to the lower age group irrespective of their educational background. [0999]

KIRAN, GAYATRI. 1999. **A study of some factors influencing cognitive and social development in pre-primary school children.** Ph.D., Psy. Bangalore Univ. Guide: Dr. Sudha Bhogle.

Problem: This study aims at exploring the role played by teaching methods in the cognitive and social development of the pre-primary school children.

Objective: To make a comparative study of the cognitive and social development of pre-primary school children studying under the traditional (Nursery) and Montessori methods of teaching.

Methodology: The sample comprised 240 pre school and 80 first Standard school-going children, selected through purposive sampling technique from Bangalore City. The tools used were

Binet-Kamat Test of Intelligence, Seguin Form Board Test, Knox Cube Imitation Test, Draw a Man Test, Gender Constancy Questionnaire, Piagetian Tasks, Brigance's Diagnostic Inventory of Basic Skills, and Vineland Social Maturity Scale. Apart from that, observation method was also used as a technique of gathering data. Collected data were treated with 't-test', factor analysis, discriminant analysis and multiple regression.

Major Findings: (1) Montessori and nursery subjects showed distinctively different profiles on the social and cognitive variables and these differences became more distinctive by the third year of pre-school. (2) The Montessori method seemed to foster development of cognitive variables such as attention, visuo-motor coordination, visual-tactile perception and abstract reasoning to a larger extent than the Nursery method. (3) Long term social development seemed to be fostered better in the Nursery method as the Montessori scores on social development showed a steady decline with increasing time spent in the pre-school as opposed to the Nursery subjects who showed a steady increase. (4) When the difference in performances were compared across Montessori and Nursery, it was seen that scores on Knox Cube Imitation Test decreased for the Montessori but the Nursery showed a steady increase. [1051]

SONAWAT, R. 1993. **Aggression in Kindergarten children.** *Journal of Indian Education*, Vol. XVIII(5), 46-51.

Problem: Present study is an attempt to assess aggression in Kindergarten children.

Objectives: (i) To observe and compare aggression in two kindergartens of three groups in each, (ii) to observe groups for body-body aggression, body-object aggression, body-object-body aggression and destructiveness, (iii) to observe handicapped and non-handicapped children in all the categories, and (iv) to observe the mixed group of children who stay longer.

Methodology: Sample consisted of 102 children from six regular groups and 70-80 children in two mixed groups in two kindergartens situated in the suburb's of Bremen. To collect the data, observations were made in 15 minutes block and were recorded by time sampling method.

Major Findings: (1) In five types of activities' Aggression towards self and towards other children was very common. The frequency was less for aggression towards objects and least of all for destructiveness. (2) In different settings it was observed that in both the kindergartens the kids were least aggressive during structured activities. In kindergarten A the children were most aggressive during outdoor free play and breakfast while in kindergarten B it was during indoor free play and lunch. (3) Kindergarten A had less outdoor space hence children played more with each other than with things and hence more struggle and differences, interferences and therefore aggression. Kindergarten B, on the other hand, had a good large outdoor facility and hence less aggression during this activity. (4) Aggression between handicapped and non-handicapped children was very little but present to a similar extent in all the three groups. [1011]

PRIMARY EDUCATION

BINDU, T.V. 1999. A comparative study of achievement of pupils in DPEP and non-DPEP schools. *Experiments in Education*, Vol. XXVII(7), 125-130.

Problem: The present study attempts to compare the achievement of pupils in DPEP and non-DPEP schools.

Objectives: (i) To compare the achievement of pupils (total sample) in DPEP and non-DPEP schools with respect to each of the school subjects, and (ii) to compare the achievement of boys, girls, rural and urban pupils in DPEP and non-DPEP schools with respect to each of the school subjects.

Methodology: The sample comprised 194 DPEP primary school pupils and 260 non-DPEP primary school pupils. Three standardised achievement tests were used for measuring achievement of pupils in Languages, Mathematics, and Environmental Studies. Test of significance of difference between means for large independent samples was used for analysing the data.

Major Findings: (1) DPEP pupils were significantly better than the non-DPEP pupils with

respect to achievement in Malayalam and Environmental studies but not in mathematics. (2) The achievement of boys in the DPEP schools were significantly better than those in the non-DPEP schools but not in mathematics. (3) Girls in the DPEP schools were superior to those in non-DPEP schools in their achievement in Malayalam and environmental studies. In mathematics girls did not differ at all. (4) Pupils in the rural DPEP schools and non-DPEP schools differed significantly in their achievement in Malayalam and Environmental Studies but did not differ in their mathematics achievement. (5) The pupils in urban schools of DPEP and non-DPEP districts, the two groups differed significantly in their achievement in Malayalam and environmental studies. [1070]

NAGPAL, S. 1997. Development of creativity and achievement. *The Primary Teacher*, Vol. XXII(3), 28-37.

Problem: The present study attempts to explore the possibility of developing creativity and cognitive thinking in terms of academic achievements in a rural classroom through thinking games as advocated by "Genevan approach and objective-based teaching models".

Objectives: (i) To study the relative effectiveness of objective-based teaching (OBT), teaching through thinking games (TTG) and traditional method of teaching (TMT) for the rural students of primary level to develop creativity and achievement in science, (ii) to study the relationship of creativity components and intelligence at primary level of rural students, (iii) to study the relationship of creativity and achievement at primary level of rural students, and (iv) to study the relationship of socio-economic status (SES) to creativity, intelligence and achievements at primary level of rural children.

Methodology: The sample comprised 66 students of Class IV of Antah village, Kota District, Rajasthan. Tools used were Self-Made Achievement Test in Science, Coloured Progressive Matrices, Culture Fair Test of Intelligence, Non-Verbal Creativity Test of Wallach Kogan, and Socio-Economic Status Scale. Data were treated with t-values, ANOVA, ANCOVA, Kruskal Wallis test and Contingency correlation.

Major Findings: (1) Students taught with the help of lesson plans prepared on the guidelines of OBT showed greater acquisition of concepts in science than those taught by the textbook method. (2) OBT was the most effective method. (3) Achievement was significantly related to intelligence, SES, verbal creativity and non-verbal creativity in experimental groups only. (4) SES was not related to intelligence in the controlled group and in one of the experimental groups (OBT). (5) SES and intelligence were significantly related to the verbal creativity in all the groups. (6) Both verbal and non-verbal creative measures were significantly inter-related in all the three groups. (7) Intelligence, verbal and non-verbal creativity components were related to achievement. (8) Creativity and intelligence were highly correlated. (9) SES was not related to intelligence and creativity. [1088]

RAO, SUDHAKAR AND KANTH, RAVI R. 1997. **Teacher's role in influencing enrolment and attendance in primary schools.** *The Primary Teacher*, Vol. XXII(3), 7-13.

Problem: The present study is an attempt to develop strategies of enrollment and attendance with a sample of eight schools in Ranga Reddy District of Andhra Pradesh.

Objectives: (i) To study the impact of teacher's intervention with pupils on attendance and enrollment, (ii) to study the impact of teacher's influence in involving the parents in the matters of school, attendance and enrollment, and (iii) to study whether PTA meetings influence the level of enrollment and attendance in primary schools.

Methodology: The research team decided to select eight out of sixty schools in seven mandals of Ranga Reddy District of Andhra Pradesh, which were experiencing high drop-out rate for the purpose of study. Tools used were Cohort analysis for selection of schools, information of enrollment, attendance, admissions and withdrawals every month, interview with irregular pupils and their parents, Questionnaire for the causes of not coming to schools from pupils, parents and teachers, PTA meetings, and case studies of irregular students. The data were processed through Cohort analysis.

Major Findings: (1) Poverty, child labour, house-

hold work were some of the prominent reasons for drop-out. (2) Teachers were able to involve community in the activities of the school for its development. (3) Teachers' interaction with pupils, parents and elders had positive impact on enrollment in schools. (4) Regular PTA meeting had positive effect on improvement of enrollment and attendance in schools. [1087]

SECONDARY EDUCATION

AYISHABI, T.C. AND KURUVILLA, M. 1998. **Achievement-motivation of secondary school children of working and non-working mothers of Kerala.** *Experiments in Education*, Vol. XXVI (12), 203-206.

Problem: The study attempts to find out the effect of maternal employment on achievement motivation of school children.

Objective: To find out whether there is any significant difference in the mean scores of Achievement-motivation of children of working and non-working mothers for the total sample and the sub-samples based on sex and locale.

Methodology: The sample comprised 871 secondary school pupils attending Standard IX, from schools of Kottayam, Ernakulum and Kozhikode Districts. The Scale of Achievement Motivation developed by Pillai *et.al.* and the Kerala Socio-economic Status Scale developed by Nair were used for collecting the data. Mean, SD and CR were used to treat the data.

Major Finding: Achievement-motivation which was a strong determinant of academic performance was found to be unaffected by maternal employment in Kerala. [0962]

BUDHDEV, PRAVINA V. 1996. **A study of attitudes of secondary school students towards various school subjects.** *Indian Educational Review*, Vol. XXXI(2), 112-125.

Problem: It attempts to study the attitudes of secondary school students towards various school subjects.

Objectives: (i) To study the attitudes of secondary school students towards various subjects according to their sex, IQ, grade and achieve-

ment, (ii) to study the attitude towards school subjects by longitudinal developmental method of Class VIII students, (iii) to study the effect of Mastery Learning Strategy (MLS) on attitude towards mathematics of Class VIII students, and (iv) to study the main factors involved in attitudes towards various school subjects.

Methodology: For cross-sectional method 746 students of Class VIII, 786 students of Class IX and 726 students of Class X were taken as subjects. For longitudinal method 471 students in the sample who remained present in all the three times of data collection were taken as subjects. For experimental study, 84 girls from Class VIII were randomly selected from the school. Tools used were Desai Bhatt Group Test of Intelligence and Attitude Scale developed and standardized by the investigator. Collected data were analysed with the help of 't'-test, 'F' test and product-moment correlation.

Major Findings: (1) Attitude of girls towards Gujarati, Mathematics, Hindi, Social Studies and Sanskrit were more positive than boys. Attitude of boys towards science was more positive than girls. (2) Time did not affect the attitude of students towards Gujarati and Social Studies. Students' attitude at the first time was more positive towards English. At the second time attitude was more positive towards Hindi and Sanskrit and at the third time attitude was more positive towards mathematics and science subject. (3) MLS affected the attitude towards mathematics. Attitude towards mathematics of the experimental group was more positive than that of the control group in the post-test. (4) There was not a single common factor in attitude towards seven school subjects. Three group factors found were: (i) attitude towards logical subjects, (ii) attitude towards familiar languages, and (iii) attitude towards non-familiar languages. [1071]

NAIR, P.V. 1999 **A comparative study of certain personality variables of pre-degree students of regular and correspondence streams.** *Experiments in Education*, Vol. XXVII(2), 35-38.

Problem: The study attempts to compare certain personality variables of pre-degree students in the regular stream and the correspondence stream.

Objective: To see whether or not certain personality variables like social adjustment, personal adjustment, achievement motivation, examination anxiety, general anxiety, introversion-extraversion, masculinity femininity can discriminate significantly between the two different groups under study.

Methodology: The data for the study has been derived from a representative sample of 186 pre-degree students from regular colleges and 344 students undergoing correspondence education. The tools used in the study were Kerala Socio-Personal Adjustment Scale, Kerala Examination Anxiety Scale, Kerala General Anxiety Scale, Kerala Introversion-Extraversion Scale, Kerala Masculinity-Femininity Scale, and Kerala Scale of Achievement-Motivation. Mean, SD and Critical Ratio were used to treat the data.

Major Findings: (1) All the personality variables used in the present study discriminated between regular and correspondence pre-degree students. (2) High score in each variable was associated with regular college students except 'general anxiety' and 'examination anxiety' where high scores were associated with correspondence course students. [0965]

NAIR, P.V. AND BINDU, T.V. 1998. **Association between certain demographic variables and discrepant achievement in six school subjects of secondary school pupils.** *Experiments in Education*, Vol. XXVI(7), 120-127.

Problem: In this study an attempt is made to find out the association between certain demographic variables like sex, locale, age, order of birth, caste and discrepant achievement in six school subjects of secondary school pupils.

Objectives: (i) To find out the incidence of discrepant achievement in six school subjects, (ii) to study the association of discrepant achievement in six school subjects with the demographic variables; sex, locale, age, birth order and caste.

Methodology: The sample comprised 879 pupils studying in Standard IX of the schools of Kerala. Proportionate stratified sampling giving representation to sex, locale, type of management of institution were used for the selection of the sample. Tools used were tests

of verbal and non-verbal intelligence and achievement tests in six school subjects. Collected data were analysed by Farquhar's Regression Technique and Chi-Square Test.

Major Findings: (1) The incidence of discrepant achievement was different in different school subjects. (2) Sex of pupils were found to be associated with discrepant achievement in social studies and mathematics. (3) Locale was associated with discrepant achievement in Malayalam, English, and Social Studies. (4) Order of birth and caste were not found associated with discrepant achievement in any of the six school subjects taken up in the study. [0968]

SRIVASTAVA, Y.V. 1993. **Teacher-acceptance by students as a function of gender and teaching subjects at the secondary level.** *Indian Educational Review*, Vol. XXVIII(2,3,4), 78-82.

Problem: The present study is an attempt to find out how much teacher acceptance is influenced by gender and teaching subjects at the secondary level.

Objectives: (i) To find out the influence of gender on teacher-acceptance by students, and (ii) to study the influence of teaching subjects on teacher-acceptance by students.

Methodology: The sample consisted of 350 teachers from 54 schools drawn through purposive sampling technique, from secondary schools of Raipur Division in M.P. The Teacher Acceptance Scale developed by the investigator was used as a tool. Collected data were treated with ANOVA.

Major Findings: (1) Female teachers were accepted more than male teachers. (2) The acceptance of teacher by their students did not depend upon the subjects taught by them. [1078]

HIGHER EDUCATION

AGGARWAL, Y.P. 1997. **Perception of burn-out and locus of control among college teachers.** *Journal of Indian Education*, Vol. XXIII(3), 17-21.

Problem: The present study was planned to find out some significant correlates of burn-out among college teachers.

Objectives: (i) To find out the level of burn-out among college teachers in terms of emotional exhaustion (EE); depersonalization (DP); and personal accomplishment (PA), (ii) to compare government versus private college teachers; external and internal control teachers, and (iii) to find out the relationships among EE, DP, PA and externality.

Methodology: The sample comprised 180 college teachers attending orientation and refresher courses at three academic staff colleges during 1995-96. The groups came from various parts of India. Tools used were Aggarwal's Adaptation of Maslach Burn-out Inventory, and Aggarwal's Adaptation of Rotter's Internality-Externality Scale. Collected data were analysed with the help of mean, SD and ANOVA.

Major Findings: (1) There existed a general low level of emotional exhaustion, depersonalization and a high level of perception of personal accomplishment of both the groups of government and private college lecturers. The perception of personal control was slightly towards externality. (2) Government lecturers were less emotionally exhausted, less depersonalized in their work and perceived higher personal accomplishments as compared to private college lecturers. However, they were more external than the private college teachers. (3) When the high external group was compared with the low external group, the former was found more emotionally exhausted, equally depersonalized and had a low perception of lower personal accomplishment as compared to the latter. [1020]

DAS, B.C. 1999. **Teachers' attitude towards the orientation programme of academic staff college.** *Experiments in Education*, Vol. XXVII(5), 85-89.

Problem: It attempts to study the teacher's attitude towards the orientation programme of academic staff college (ASC), Gauhati University.

Objectives: (i) To find out the extent to which the university and college teachers are favourably or otherwise disposed towards the orientation programme, (ii) to find out if there

is any significant difference between the male and female university and college teachers in respect to their attitude towards the orientation programme, (iii) to find out if there is any significant difference between the teachers working in universities and those working in colleges in respect of their attitude towards the orientation programme, (iv) to find out if there is any significant difference between the science and arts university and college teachers in respect of their attitude towards the orientation programme, and (v) to find out if there is any significant difference between university and college teachers having only masters degree and those having M.Phil./Ph.D. degree in respect of their attitude towards the orientation programme.

Methodology: The sample consisted of all the 35 male and female university and college teachers of different disciplines who underwent the orientation programme conducted by the ASC, Gauhati University, during 1997-98. An attitude scale was developed by the investigator to collect the data. Mean, SD, and Critical Ratio were computed for the analysis of data.

Major Findings: (1) The attitude of teachers towards the orientation programme conducted by the academic staff college was positive and significant. (2) There was no significant difference between male and female university and college teachers, and science and arts teachers with respect to their attitude towards the orientation programme. (3) All the teachers irrespective of their level of qualifications showed favourable attitude towards the orientation programme. [1083]

MISHRA, SARITA AND SINGH, R.P. 1998. **Personality adjustment of graduates with reference to their socio-economic status.** *Praachi Journal of Psycho-Cultural Dimensions*, Vol.14(1), 43-44.

Problem: This study attempts to find out the personality adjustment of male and female graduates belonging to high and low socio-economic status.

Objective: To study the personality adjustment of male and female graduates of high and low SES groups.

Methodology: Two hundred male and female graduates of high SES and 200 male and female graduates of low SES in age range of 17 to 20 years were chosen from Aligarh on the basis of Stratified Random Sampling Method. Personality Adjustment Inventory by R.P. Singh was used as a tool to collect the data. The collected data were treated with mean, SD and 't'-test.

Major Findings: (1) Male and female graduates of high SES had appropriate facilities and means to cope with environmental conditions. (2) Male and female graduates of low SES due to poor facilities of accommodation, transportation and communication were unable to make proper adjustment with environmental situations. [1138]

SUBRAHMANYAM, S. 1998. **An appraisal of academic staff college orientation programme.** *Experiments in Education*, Vol. XXVI (12), 206-209.

Problem: The study was conducted to assess the impact of Academic Staff Orientation Programmes (ASOP) on the university and college teachers.

Objectives: (i) To examine the overall impact of the ASOP on participants, (ii) to examine the reactions of teachers involved in the ASOP with regard to several objectives of the course, and (iii) to compare the teachers belonging to various institutions, teaching different subjects with varied lengths of teaching experience, and belonging to different managements with regard to the benefits of the programmes.

Methodology: 150 lecturers belonging to arts and humanities and 150 lecturers belonging to pure and applied science constituted the sample for the study. A detailed questionnaire had been developed by the researcher to measure the impact of ASOPs on the participants. Mean, SD and 't'-test were employed to analyse the data.

Major Findings: (1) The ASOP were found useful to the participants. (2) The teachers considered these programmes very necessary for them to improve their teaching skills. (3) The programmes were more beneficial to the science teachers compared to their counterparts in arts

and humanities. (4) The teachers with more than 10 years of experience were not highly benefited by the ASOP. (5) The ASOPs were found to be more useful to the lecturers working in the colleges located in the rural areas. (6) There was no difference in deriving the benefits of ASOPs between the lecturers belonging to government colleges and those of private colleges. [0963]

SUSHAMA, R. 1996. Role of academic bodies with special reference to the academic programmes in the universities in Kerala. Ph.D., Soc. Sc. Cochin Univ. of Science and Technology. Guide: Prof. P. Ramachandra Poduval.

Problem: The study deals with the effectiveness of academic bodies in their functioning and also in introducing qualitative changes in the designing and implementing of varied academic programmes in the universities in Kerala.

Objectives: (i) To make a study of the powers, duties and functions of the academic bodies of the universities and to find out whether they function as effectively as envisaged in the laws of the university statutorily, (ii) to find out effectiveness of academic bodies in designing and implementing academic programmes in the universities, (iii) to explore various aspects of different academic programmes in terms of their design and management, and (iv) to find out the reasons for the failure of certain academic programmes in the universities.

Methodology: The sample comprised academicians and academic administrators of the universities in Kerala. A questionnaire was used for data collection. Case studies and interviews were also conducted. Two way analysis by Friedman was used for analysing the data.

Major Outcomes: (1) The academic bodies in the universities in Kerala were not fully effective in exercising their powers and discharging their duties as envisaged in the laws of the universities. (2) They did not take enough interest in introducing new and innovative academic programmes in the universities. (3) They did not have a dynamic approach in their functioning. (4) Most of the academicians as well as academic administrators were more or less conservative in their general approach to academic affairs. They did not favour drastic changes in the general set up of the university system.

(5) Effectiveness of the academic bodies in introducing radical changes in the field of higher education was handicapped by interference and pressures from political, social and religious organisations. (6) An evaluative study of various aspects of different academic programmes of the universities in Kerala revealed that specialised courses relevant to the present times and in response to the demands of the employment market were not designed and implemented. (7) Factors like lack of physical facilities, library facilities, unavailability of trained faculty and bottlenecks caused by the bureaucratic set up in the universities created hurdles in the smooth implementation and running of the academic programmes. (8) Limited scope of employment due to overspecialisation or lack of specialisation was a major reason for the failure of courses. (9) Vested interests of persons or groups in the universities which played their role in starting courses also contributed to the failure of courses. [1105]

VASAVA, M.B. 1999. The progress and problems of higher education in the state of Gujarat. Ph.D., Edu. South Gujarat Univ. Guide: Dr. R.B. Chaudhari.

Problem: This study addresses the progress and problems of higher education in the state of Gujarat.

Objectives: (i) To review the progress of higher education in the state of Gujarat at two levels, viz, qualitative and quantitative growth from the year 1960-61 to 1993-94, (ii) to identify vital problems of higher education such as admission, discipline, methods of teaching, methods of assignment, physical facilities, laboratory, library, government policy, methods of evaluation and results and inspection work being faced by the administrators, principals, deans of the faculties of university departments, managements, teaching staff and the students in the state of Gujarat, (iii) to provide suggestions for solving the problems and improving of the higher education of Gujarat State, (iv) to study the historical background of higher education in the state of Gujarat, and (v) to study the financial planning under the sixth and seventh five year plan by the state government of Gujarat.

Methodology: Sample comprised 7 heads of various university departments, 70 college principals and 630 teaching staff members of affiliated colleges. In order to collect the relevant data required for the study the investigator had used the reports of different education commissions held by the government of India specially for education. The researcher had also used the statistical information and Annual administrative reports published by the state government of Gujarat. The researcher had also used opinionnaires as the instrument to study the problems of higher education in the state of Gujarat. Qualitative methods were employed to analyse the data.

Major Findings: (1) There were 4 universities, 83 colleges, 2,896 teaching staff members and 38,327 students during the academic year 1960-61, while there were 8 universities, 418 colleges, 10,271 teaching staff members and 4,00,361 students in the year 1993-94 in the state of Gujarat. (2) There was only 1 college of arts, science and commerce, 22 staff members and 1,070 students in Dang District which was the last district, while there were 80 colleges, 2,509 teaching staff members and 9,02,876 students only in Ahmedabad District during the year 1993-94 in the state of Gujarat. (3) There were 5,585 girls in the academic year 1960-61 under the five year plan, where as 1,71,178 girls in higher education during the year 1993-94. (4) There were 2,208 Scheduled Castes students in post graduate departments during the academic year 1991, where as 3,049 in the year 1993-94. (5) There were 1,937 Scheduled Tribes students in P.G. section in the year 1960-61, while 2,500 students in the year 1993-94 in the state. (6) There were 22 government colleges, 20,222 boys and 7,522 girl students and 692 teaching staff in the state of Gujarat during the year 1993-94. (7) Problems of higher education in the region were inadequate teaching staff, poor attendance due to tuition classes, teacher's unfamiliarity with effective reference books, teaching only through lecture method and lack of funds. [0978]

SCIENCE EDUCATION

PATEL, VINOD. 1998. **Impact of operational research technique of network analysis on learning science.** *Perspectives in Education*,

Vol.14(1), 37-46.

Problem: The present study is an attempt to assess the impact of Operational Research Technique of Network Analysis (ORTNA) on learning science.

Objective: The present study aims at showing the role of operational research technique of network analysis in increasing the effectiveness of learning science.

Methodology: The sample comprised 100 students of Standard IX drawn from a high school of Surat. They were equally divided into experimental and control group. The investigator had selected a few units of Standard IX science textbook to analyse the content on the basis of ORTNA and experimental group was subjected to this treatment for twelve weeks.

Major Findings: (1) The learning of physics through the networks was found better than the traditional method in terms of the achievement of the pupils. (2) In the attainment of knowledge, comprehension, application and skill, ORTNA was found better than the conventional textbook. (3) Two groups differed significantly under all the 4 categories of objectives and experimental group was better than the control group in realizing the select objectives. [0993]

PATIL, GEETANJALI S. 1997. **A critical study of scientific attitude of secondary school students from rural area and construction of a standardized scale for its measurement.** Ph.D., Edu. Shriwaji Univ. Guide: Prof. R.B. Dewasthalee.

Problem: The study centered upon the measurement of scientific attitude among the secondary school students from rural area using a standardised scale developed for the purpose.

Objective: To assess the scientific attitude among the students of secondary schools from rural area.

Methodology: The sample comprised 8 grantable and 7 non-grantable high schools of Kolhapur District of Maharashtra, where the intact Classes of VIII, IX and X of the year 1994-95 served as subjects. The tools used to collect the

data were Scientific Attitude Scale developed by the researcher and interviews. Mean, SD and Critical Ratios were used to analyse the collected data.

Major Findings: (1) The boys and girls differed in their levels of scientific attitude. (2) The boys and girls studying in Standard VIII and IX differed in their levels of scientific attitude. (3) The boys and girls studying in Standard X did not differ in their levels of scientific attitude. (4) The students from grantable schools and students from non-grantable schools differed in their levels of scientific attitude. (5) The level of scientific attitude increased with the grade. [0979]

PRAKASH, BRAHM. 1993. **Concrete materials and guided self study for learning chemistry.** *Journal of Indian Education*, Vol. XVIII(5), 29-33.

Problem: Present study is an attempt to assess the effectiveness of concrete materials combined with guided self study in learning chemistry.

Objective: To develop a learning strategy comprising concrete materials for understanding formal level concepts in chemistry and guided self study and see its effectiveness on students' performance.

Methodology: The sample comprised two sections of Class IX in two different schools. Eight students of Class XI were used as tutors. One section of Class IX in each school was assigned to experimental treatment and the other section to control treatment. A study guide based on Class IX chemistry course split into 12 units was prepared. Students' reactions on the use of the present experimental approach were collected through a questionnaire and personal interview.

Major Findings: (1) Performance of the students in the experimental group in both the schools were better than that of the control group. (2) Majority of the students wanted this type of materials to be used in other subjects as well. [1009]

7. RAJAN, K.M. 1996. **A comparative study of three modes of presenting analogies in**

chemistry. *Perspectives in Education*, Vol. 12(4), 215-230.

Problem: The study attempts to compare the effects of three modes of analogy presentation — verbal, pictorial and computer simulation.

Objectives: (i) To study the effect of mode of analogy presentation on student learning, and (ii) to examine whether mode of analogy presentation affect all students equally.

Methodology: The sample comprised 266 Standard IX students who were randomly assigned to the three treatment conditions. Five pre-test and two post-test measures were obtained. The five pre-test measures were — prior achievement in language, prior achievement in chemistry, analogical reasoning ability visualisation ability and an imagery test measuring how students pictorially represent gas molecules. The two post-tests were a parallel form of the imagery measure and an achievement test. The collected data were treated with analysis of variance, correlation, regression analysis and Scheffe's test.

Major Findings: (1) The simulation group performed significantly better on post-imagery than the pictorial group. (2) Measures of achievement did not show any significant difference between the three treatment conditions. (3) There were aptitude-treatment interactions between students's analogical reasoning ability and pre-imagery with treatments. [1139]

RAJYALAKSHMI, T. 1996. **Creativity and cognitive preference styles in Biology.** *Journal of Indian Education*, Vol. XXII(2), 47-51.

Problem: The present study investigates the relationship between cognitive preference modes and student's creativity.

Objectives: (i) To find out the correlation between measures of creativity and cognitive preference in biology, (ii) to find out whether there are sex differences in creativity and cognitive preference styles in biology, and (iii) to study the correlation between creativity and achievement in biology.

Methodology: The sample consisted of 200 high school students (96 boys and 104 girls), drawn

at random from six schools in Puri, Cuttack and Ganjam Districts of Orissa. The tools used were Cognitive Preference Inventory in biology (CPIB) by Acharyulu Das, and Acharyulu's Think Creativity (ATC) Test. Collected data were treated with Product-moment correlation and 't'-test.

Major Findings: (1) Positive relationship between ATC and CPIB was found. (2) The correlation between each of the measures of fluency, flexibility and originality and achievement in biology was not found statistically significant. (3) Statistically significant sex differences in flexibility was found in favour of boys but no sex differences was found in fluency and originality. (4) With respect to four cognitive modes, significant sex differences in recall mode was found in favour of boys but no sex difference was found on the principles, questioning and application modes. [1039]

SAMINATHAN, B. 1999. **Effect of Information processing approach on developing problem-solving ability in Physics**. Ph.D., Edu. Alagappa Univ. Guide : Dr S. Mohan.

Problem: The present study attempts to develop new innovative and effective instructional strategies for teaching physics in classroom through information processing approach which aimed at enhancing problem-solving ability of the students.

Objectives: (i) To design and develop the information processing approach model in order to enhance the problem-solving ability of learners in doing problems in Physics, and (ii) to evaluate the Information processing approach model as a means of enhancing the problem-solving ability of learners in doing problems in Physics.

Methodology: The sample comprised 57 Class XI students studying Physics as a subject. The tools used were Home Environment Scale, Anxiety Inventory, Achievement Motivation Inventory and Achievement Test. The collected data were treated with mean, SD, 't'-test, 'F' test and Multiple regression analysis.

Major Finding: The learning through the information processing approach model was effective

in enhancing the problem-solving ability in physics at higher secondary level. [1096]

SANDHU, R.C. 1998. **School and non-school factors as determinants of attitude towards Science**. Ph.D., Edu. Kurukshetra Univ. Guide: Dr S.M. Gupta.

Problem: The study addresses the school factors, i.e., school environment, class, subject group and academic achievement of senior secondary science students as determinants of their attitude towards science, and the non-school factors, i.e., home environment, socio-economic status, locality, gender, media (newspaper, T.V.) influence, hobbies, goal orientation, etc. of science students affecting the attitude towards science.

Objectives: (i) To study main and interactional effects of home environment, sex and socio-economic status; school environment, locality and academic achievement; school environment, subject group and class of senior secondary science students of Haryana on attitude towards science and its various dimension viz. value, evaluation, interest and activity, and (ii) to study the significance of difference between students having favourable attitude and those having non favourable attitude towards science in relation to; time spent daily on newspaper reading; importance given to various articles while reading newspaper; time spent daily on T.V. watching; preference for science related T.V. programmes; hobbies and their aim of life in future.

Methodology: The sample of 1,200 science students was selected from 10+1 and 10+2 science students studying in senior secondary schools and colleges of Haryana State using stratified random sampling technique. Tools used to collect the data were background questionnaire, Socio-Economic Status Scale, Attitude Towards Science Scale and Home Environment Scale developed and standardized by the investigator, and School Environment Scale developed by S.K. Mishra. Mean, SD, percentile, 't' ratio, chi-square and ANOVA were used to analyse the collected data.

Major Findings: (1) Home environment was found to have significant effect on attitude towards science and its four dimensions viz. value,

evaluation, interest and activity of students. (2) School environment was found to have significant effect on attitude towards science and its three dimensions viz. value, interest and activity of students. (3) Urban students were found to have more favourable attitude towards science than rural students. (4) Academic achievement was found to have significant effect on evaluation dimension of attitude towards science of students. (5) 10+2 level students were found to have more favourable attitude towards science than 10+1 level students. (6) Students reading articles on science in newspapers had favourable attitude towards science. (7) Programmes on TV relating to science like UGC programme, turning point, discovery and what, why and how had a significant favourable influence on attitude towards science. (8) Greater percentage of students having favourable attitude towards science had the aim to become scientists in future life. (9) The main effect of sex, socio-economic status and subject group were found to be insignificant on attitude towards science and its four dimensions, namely value, evaluation, interest and activity. (10) The two and three factor interactions of both school and non-school factors were found to be insignificant on attitude towards science of the students. [0950]

SEETHARAMAPPA, J. AND VIDYAPATI, T.J. 1996. **Study of student's difficulties in understanding calculations involving the Mole.** *School Science*, Vol. XXXIV(1), 18-21.

Problem: The present study was conducted to understand student's difficulties in solving problems related to mole.

Objective: To assess secondary school students' knowledge on mole concept.

Methodology: The students who participated in the study came from secondary schools located in different regions of Karnataka and Andhra Pradesh. The relevant data were collected using free interviews, a questionnaire based enquiry followed by structured interviews. The mean scores, standard deviation and t-values were computed while treating the data.

Major Findings: (1) There was significant difference between the performance of CBSE and state curriculum students; boys and girls and

English and regional language medium in their understanding of mole. (2) Significantly CBSE curriculum students, girls and English medium students had scored better marks. (3) 35% of the students did not know the relationship between the molecular weight of a compound and the number of particles present in 1 mole of a substance. (4) 59% of the students answered correctly while most of the remaining students went wrong in numerical calculation. (5) Students expressed their poor knowledge of the relationship between number of particles and gas volume. (6) Majority of the students had poor knowledge of the relationship between a mole of substance and atomic weight/molecular weight, a mole of atoms/molecules and Avogadro's number, a mole of molecules and gas volume, Avogadro's number of atoms/molecules and atomic weight/molecular weight, and a mole of atoms/molecules and atomic weight/molecular weight. [1075]

SHARMA, PUSHPALATA AND SHUKLA, PRABHAVATI. 1999. **CSAT as a diagnostic measure of scientific temper.** *Psycho-Lingua*, Vol.29(1), 39-47.

Problem: This study aims at identifying factors of Comprehensive Scientific Aptitude Test (CSAT) which is an adaptation under Indian condition in Hindi of the Stanford Scientific Aptitude Test.

Objectives: (i) To identify factors of CSAT, and (ii) to evaluate CSAT as a Diagnostic tool of scientific temper.

Methodology: One hundred college adolescents from science stream evenly drawn from both the sexes, were randomly selected from the first year of two science colleges of Bilaspur in Madhya Pradesh. Scores obtained on the Comprehensive Scientific Aptitude Test by these science students were subjected to coefficients of correlation and Thurston's Centroid method of factor analysis.

Major Findings: (1) Except three indices, namely, 'Experimental Bent' and 'Ability to deduce conclusions from the data provided', 'Detection of Inconsistencies or, Illogical conclusions', and 'Accuracy of observation', the relationships between the scores of the seven components of the SAT have not been found significant. (2) The composite test of scientific aptitude has shown

highly significant relationship with six of its seven components; namely experimental Bent, Detection of Inconsistencies or illogical conclusions, ability to deduce conclusions from the data provided, ability to reason and solve problem, caution and thoroughness, and accuracy of observation. (3) Four factors of SAT, namely, Lateral thinking, scientific perception, sensitivity, and generalization have been identified. (4) CSAT has been found to have a high-order validity as a 'Diagnostic Measure' of scientific temper as indicated by its factor components. [1143]

✓ SWAMY, A.M. AJATHA. 1995. **Effect of inquiry training model of teaching science on science process skills, creativity and curiosity of secondary school students.** Ph.D., Edu. Karnatak Univ. Guide: Dr. H.M. Kasinath.

Problem: The study was undertaken to investigate how effectively the science process skills, creative thinking ability and curiosity could be developed in secondary school students.

Objectives: (i) To compare the effectiveness of Inquiry Training Model and Conventional method of teaching Science, in terms of development of 'Science Process Skills'; fostering components of creativity; and boosting curiosity, (ii) to investigate the interaction between 'treatments' (aforesaid teaching model/method) and 'levels' of students (determined on the basis of general mental ability and higher mental ability in science) with reference to development of science process skills; fostering components of creativity; and boosting of curiosity, and (iii) to investigate whether students sustain science process skills, creativity and curiosity developed through Inquiry Training Model.

Methodology: The sample comprised 36 matched pairs from two divisions of Class IX. Tools used were Standard Progressive Matrices, Test of Higher Mental Ability in Science, Baquer Mehdi's-Verbal Test of Creative Thinking, Science Process Skills Test, and Curiosity Test. Two-way analysis of variance, Scheffe's test and "t"-test were used to analyse the data.

Major Findings: (1) Inquiry Training Model of teaching science was more effective than the conventional method in developing science process skills, fostering fluency and originality

components of creativity and in boosting curiosity. (2) Inquiry training model of teaching science was more effective than the conventional method in developing science process skills for students belonging to above average and average groups. (3) Both Inquiry Training Model of teaching science and conventional method were equally effective for students belonging to below average category. (4) Inquiry Training Model of Teaching Science and Conventional method were equally effective in fostering flexibility component of creativity. (5) Inquiry Training Model of teaching science is equally effective for all the three levels of students in fostering fluency and originality components of creativity. (6) The students sustained Science Process Skills developed through Inquiry Training Model of teaching science. (7) The students sustained fluency and originality components of creativity fostered through Inquiry Training Model of teaching science. (8) The students sustained curiosity boosted through Inquiry Training Model of teaching science. [1104]

VALSALA, K.E. 1998. **Certain cognitive and affective correlates of process outcomes in Physics of university entrants.** Ph.D., Edu. Calicut Univ. Guide: Dr. Kamala S. Pillai.

Problem: The study centered around certain cognitive and affective correlates of process outcomes in physics of university entrants.

Objectives: (i) To find out the relationship between process outcomes in physics (total) and each of the select cognitive and affective variables of university entrants for the whole sample, boys and girls, (ii) to find out the relationship between each of the component dimensions of process outcomes in physics and each of the select cognitive and affective variables of university entrants for the whole sample, boys and girls, (iii) to compare equivalent correlations obtained (Process outcomes in physics and each of the select independent variables) between boys and girls, (iv) to develop multiple regression equation for predicting process outcomes in physics using select cognitive and affective variables, and (v) to estimate the factor structure from the select cognitive and affective variables.

Methodology: The study was conducted on a sample of 575 students. The tools used were

Standard Progressive Matrices, Differential Aptitude Test Sub-test-III and IV, Test of Creativity, Group Embedded Figures Test, Scale of Attitude towards Science, Scale of Attitude towards Mathematics, Scale of Attitude towards Problem Solving, Scale of Achievement Motivation, and Test of Process Outcomes in Physics. The collected data were treated with correlation, multiple regression analysis and factor analysis.

Major Findings: (1) The study revealed that among the cognitive variables, creativity, spatial ability and intelligence were the best correlates of process outcomes in physics. (2) Those students who possessed perceptual reasoning and creative processing ability performed better in process skills. (3) Attitudinal disposition of the university entrants were the best correlates of 'Process outcomes in physics'. [1100]

MATHEMATICS EDUCATION

BALASUBRAMANIAN, R. 1999. **Effect of cognitive modeling on learning mathematics.** Ph.D., Edu. Alagappa Univ. Guide: Dr. S. Mohan.

Problem: This study addresses the problem of an instructor systematically and carefully revealing his or her own thoughts and reasoning while solving a problem in mathematics and encourage the learner to use similar thinking processes.

Objectives: (i) To design and develop cognitive modeling to enhance the problem solving ability of students in mathematics, (ii) to evaluate the cognitive modeling steps designed to enhance the problem-solving abilities in mathematics, (iii) to apply the cognitive modeling to develop learning in mathematics, and (iv) to find out the effectiveness of cognitive modeling in problem solving among students of mathematics.

Methodology: The sample comprised all the 92 students who were doing second year B.Sc. mathematics in His Highness The Rajah's College, Pudukkottai in Tamilnadu. The tools used were Achievement Test in Mathematics, Home Environment Scale, Anxiety Inventory (G. Form), and Achievement Motivation Inventory. Mean,

Standard deviation, multiple regression analysis, Kruskal-Wallis non-parametric test, t-test and ANOVA were used to analyse the collected data.

Major Finding: The cognitive modeling instructional strategy was effective in enhancing achievement in mathematics at undergraduate level. [1124]

BHATIA, KUSUM. 1998. **Identification of learning difficulties in decimals.** *The Primary Teacher*, Vol. XXIII(2), 8-13.

Problem: The study was conducted to identify the learning difficulties in decimals.

Objectives: (i) To identify general learning difficulties of students of Class V in mathematics syllabus, and (ii) to identify specific learning difficulties of students of Class V in areas in which they are weak.

Methodology: Sample comprised 261 students of 8 sections of Class V in MCD model schools of Delhi by random sampling technique. Criterion tests were administered to the students in order to identify students with learning difficulties. Moreover, Raven's Coloured Progressive Matrices (RCPM) and a Diagnostic Test were administered. Percentages were calculated to analyse the data.

Major Findings: (1) A large percentage of students were found to be deficient in their performance on criterion tests. (2) Of these, 31 students had average or above average intelligence. Their poor performance, therefore, was attributed to their lack of poor understanding and application skills. (3) Fifteen types of common errors had been identified. (4) Students were not aware of the use of numeration table, which was a must for understanding of place value concept, changing fractions into decimals etc. [1092]

PAL, G.C. AND NATARAJAN, CHITRA. 1997. **Gender and the mathematical mystique.** *Indian Educational Review*, Vol. XXXII(1), 1-12.

Problem: Present study is an attempt to find out gender differences on mathematics achievement and mathematics-related variables, and the relationship between them.

Objectives: (i) To study the gender differences in the achievement scores on mathematics and different concepts of mathematics, (ii) to study the gender differences on the scores of mathematics-related variables such as social support in mathematics, classroom support in mathematics, attitude towards mathematics, perceptions of mathematics and liking of mathematics teaching, and (iii) to study the gender differences on mathematics achievement and mathematics-related variables across social context (rural and urban).

Methodology: The sample comprised 210 boys and 116 girls of Class IV, selected from five rural (tribal) schools in Maharashtra and one urban school in the city of Mumbai. Of these, 132 were from rural schools and 194 were from the urban schools. Tools used were Marathi Mathematics Achievement Test developed by NCERT and a questionnaire constructed by the researchers. Collected data were analysed using mean, SD, t-test and correlation coefficients.

Major Findings: (1) The gender differences in favour of girls on mathematics achievement and three of the mathematics concepts were found to be significant. (2) It was revealed that boys and girls did not differ on the support received from peer group and teachers. But the girls received significantly higher support from family members than boys. (3) No significant gender differences were noticed on mathematics attitude, perceptions of mathematics and liking towards mathematics teaching. The girls, had comparatively more favourable attitude towards mathematics than boys. (4) A comparison across the context revealed that the boys and girls in the urban area had significantly better scores on mathematics achievement than their counterparts in the rural area. But on the mathematics-related variables, the gender differences were not found remarkable. (5) Home support had significant positive correlations with teacher support, liking towards teaching, perceptions of mathematics and attitude toward mathematics, for girls. (6) Peer support was found significantly related to teacher support and mathematics attitude for boys, and it was not significantly related to other variables for girls. (7) Home support, teacher support and liking of teaching influenced the perceptions and attitudes related to mathematics and all these factors interactively influenced the mathematics achievement

for both boys and girls. [1084]

REDDY, G. LOKANADHA AND RAMAR, R. 1995. **Effectiveness of multimedia based modular approach in teaching mathematics to low achievers.** *Journal of Higher Education*, Vol. XVIII(2), 283-288.

Problem: The present study is an attempt to develop multimedia modules for mathematics for the use of low achievers studying in Standard VIII and to measure their effectiveness and also assess their advantage over the traditional lecture method.

Objectives: (i) To develop multimedia modules for mathematics of Standard VIII, and (ii) to find out whether there is any significant difference between the pre-test and post-test mean scores of low achievers in the control group and experimental group.

Methodology: The sample of the study comprised lowest 50 low achieving students of VIII Standard from S.S.H.N. Hr. Secondary School, Muhavoor. They were divided equally to constitute experimental group and the control group following the systematic random sampling technique. The control group was taught through traditional lecture method and experimental group through the multi-media modular approach. A normal group of 25 comprising above-average students was also formed and they were taught through traditional lecture method only. After 30 days of experiment an achievement test as post-test was conducted to all the groups and data were analysed by using mean, SD and t-test.

Major Findings: (1) The control group low achievers performed significantly better in their post test as compared to their pre-test performance, and so were the experimental group. (2) The experimental group performed significantly better than the control group on the post-test. (3) The normal group comprising high achievers performed significantly better than the control group subjects as well as experimental group subjects. [1060]

SRINIVASAN, K.J. 1999. **A study of achievement in mathematics Standard VIII students of Tamil Nadu as related to certain selected variables.** Ph.D., Edu. Annamalai Univ. Guide: Dr S. Sundararajan.

Problem: The study attempts to analyse the achievement in mathematics of Standard VIII students in relation to certain selected variables.

Objectives: (i) To find the level of achievement in mathematics as a whole as well as its four componential aspects namely knowledge (K), Understanding (U), Application (A) and Skill (S) of students, (ii) to study the student's perception of the mathematics learning environment, (iii) to study student's level of achievement-motivation and attitude towards the study of mathematics, and (iv) to study whether there is any significant difference between pairs of sub-samples formed on the basis of sex, types of schools, their locale, father's educational status, mother's educational status, parent's income level, community in respect of their achievement, and (v) to study the relationship between perceived learning environment and mathematics achievement (M.A.), student's attitude and M.A. and academic-achievement motivation and M.A.

Methodology: Sample comprised 1,072 Standard VIII students drawn from twenty four schools from three districts of Tamilnadu. The tools used were Mathematics Achievement Test, Attitude of Students Towards the Study of Mathematics, Perceived Levels of Student's Mathematics Learning Environment, and Academic Achievement Motivation tool developed by the investigator. Collected data were treated with mean, SD, correlation, and regression analysis.

Major Findings: (1) The overall achievement in mathematics of students studying in Standard VIII was marginally high. (2) Student's achievement in respect of the two objectives namely 'knowledge' and 'understanding' was higher than the average. (3) Student's achievement in respect of the other two objectives namely application' and 'skill' was below average. (4) Sex, locale, types of school management, economic status and community status had no significant bearing on student's overall achievement in mathematics. (5) Educational status of parents significantly affected the mathematics achievement of their children in respect of all the four componential aspects namely knowledge, understanding, application and skill. (6) The perceived mathematics learning environment and attitude towards the study of mathematics of the entire sample were unfavourable.

(7) The academic-achievement motivation of the entire sample of students was high. (8) Attitude of students towards the study of mathematics had the highest correlation with mathematics achievement while academic-achievement motivation had least correlation with the dependent variable mathematics achievement. (10) From the multiple regression analysis it was found that about 30% of the achievement of mathematics was attributable to factors such as learning environment, attitude towards the study of mathematics, and academic-achievement motivation. [1029]

SUMANGALA, V. 1998. **Effect of tutoring at home on achievement in mathematics of secondary school pupils.** *Experiments in Education*, Vol. XXVI(9), 9-12.

Problem: The present study attempts to find out whether tutoring at home by parents or siblings had any effect on achievement in mathematics among school pupils.

Objective: To study the effect of tutoring at home by parents or siblings on achievement in mathematics among school pupils.

Methodology: The sample comprised 362 boys and 388 girls of Standard IX drawn from secondary schools. The tools used were Questionnaire on tutoring at home in mathematics and generalised test of achievement in mathematics. The collected data were subjected to one way ANOVA, 'Cr-Value and correlation.

Major Finding: Home-tutoring in mathematics, whether by parents or by siblings had significant positive but low effect on achievement in mathematics. [0966]

PHYSICAL AND HEALTH EDUCATION

ALI, JAOWAD. 1998. **A study of predictors of performance of hockey players.** *Journal of the Indian Academy of Applied Psychology*, Vol. XXIV(1,2), 109-112.

Problem: The present investigation was designed to investigate predictors of performance of hockey players.

Objective: To study the influence of duration of participation in the game, level of participation in the game, length of training, parents' education, profession, income, sports background and parents' encouragement for the game, on the performance of hockey players.

Methodology: Sample comprised 224 players from 14 Universities who participated in Intervarsity hockey championship held at Gorakhpur in November 1994. A proforma was developed by the investigator to collect responses of the players. Collected data were treated with multiple regression analysis and ANOVA.

Major Finding: It was found that four out of eight independent variables, i.e., duration of participation, length of training, parents' education and father's profession were significant predictors of high performance of hockey players. [1047]

HELINA, M.G. 1998. **Construction of norms for the Aahperd youth fitness test variables for the Physical Education professional college men and women students in Tamil Nadu.** Ph.D., Phy. Edu. *Alagappa Univ.* Guide: Dr K. Pown Radha.

Problem: It is an attempt to standardise Aahperd youth fitness test variables for the Physical Education professional college, men and women students separately in Tamil Nadu.

Objective: To standardise the Aahperd Youth Fitness Test for use in Physical Education colleges for men and women.

Methodology: Sample comprised 1,524 men and women within the age range of 19 to 25 years studying in the courses of M.P.ED., B.P.Ed., H.C.P.Ed., M.P.E. and B.P.E. The tools used were Horizontal bar, Stop watch, 2 wooden blocks and Measuring tape. Mean and SD were used to analyse the results.

Major Outcomes: (1) Norms were successfully developed for pullups for men, situps for men, shuttle run for men, standing broad jump for men, 50 yards dash for men, 600 yards run/walk for men, Flexed arm hang for women, situps for women, shuttle run for women, standing broad jump for women, 50 yards dash for women, 600 yards run/walk for women.

(2) Qualitative grading was done on the categories of failing, below average, average, above average, good and outstanding. [1016]

KAUR, RAMNIK. 1998. **A study of intelligence and creativity of pre-adolescence children at different levels of physical fitness.** Ph.D., Edu. *Kurukshetra Univ.* Guide: Dr (Mrs.) Sudesh Talwar.

Problem: This study attempts to see how creativity and intelligence are related to physical fitness and to find if high or low level of physical fitness influences or get influenced by intelligence and creativity.

Objectives: (i) To find out the level of creativity of pre-adolescent children, (ii) to find out the level of intelligence of pre-adolescent children, (iii) to find out the level of physical fitness of pre-adolescent children, (iv) to relate intelligence and creativity to physical fitness, (v) to find out if level of physical fitness and sex (boys and girls) have any discriminative property as associated with intelligence and creativity.

Methodology: The sample of the study consisted of 400 children of pre-adolescence age group (10 or 12 to 13 or 14 years), 200 boys and 200 girls drawn from 15 urban and rural government and non-government schools of Haryana. This sample was selected by stratified random sampling technique. Tools used to collect data were Sharma Bicycle Test of Intelligence, Torrance Tests of Creative Thinking (Verbal Form-A) and AAHPER Youth Fitness Test. Collected data were treated with mean, SD, 't' test, skewness, kurtosis, co-efficient of correlation and quartile deviation.

Major Findings: (1) Boys were superior to girls at all the three levels of physical fitness. (2) Boys had high level of intelligence than girls. (3) Girls were superior to boys on total creativity and its dimensions. (4) Intelligence discriminated between high and low physical fitness group and high and moderate physical fitness group in boys and girls. (5) Composite creativity and its dimensions discriminated between high and low level of physical fitness in boys group. Whereas, in respect of girls, the high and low physical fitness groups discriminated only on fluency and flexibility dimensions, while on composite creativity and originality, the two groups of

physical fitness did not differ. (6) Physical fitness and intelligence, irrespective of sex was positively correlated. (7) Physical fitness and composite creativity and its dimensions were positively related in respect of boys and girls. [0951]

KENCHAPPANAVAR, R.N. 1998. **Health modernity and educational intervention.** Ph.D., Psy. Karnatak Univ. Guide: Dr. P.S. Halyal.

Problem: The study attempts to measure the extent of health modernity of the sample women and further to intervene with and evaluate the impact of Health Modernity Education Intervention Programme (HMEIP) on the health modernity of the women exposed to it.

Objectives: (i) To measure the extent of health modernity in different sample sub-groups, (ii) to assess the areas of ignorance and misconceptions existing in the sample women in various health dimensions like physical health, mental health, child care, breast feeding, AIDS, cancer, nutrition and diet, etc., (iii) to design and intervene with an HMEIP to the experimental group, and (iv) to evaluate the impact of HMEIP on the health modernity of the women exposed to it.

Methodology: The sample of the study comprised 200 educated and uneducated rural women who were further divided into married and unmarried women in the age group of 15-45 years. They were selected through random sampling technique. Tools used to collect the data included Health Modernity Scale of Singh, A.K. and translated into Kannada by Halyal and personal data questionnaire. Collected data were treated with mean, S.D. and 't' test.

Major Findings: (1) It was found that the sample on the whole was very low on health modernity. (2) Educated women had higher health modernity than uneducated women. (3) Women belonging to high socio-economic status were significantly higher on health modernity than women belonging to low SES. (4) There was no significant influence of marital status on the health modernity of educated women. (5) However in case of uneducated women marital status had a significant influence on the health modernity. (6) There were many areas of ignorance and misconceptions in all the 10 dimen-

sions of health modernity, however they were more in the dimensions of physical health, mental health, mental retardation, child care and AIDS. (7) HMEIP had a significant impact on the health modernity of the women exposed to it. (8) The health modernity of women exposed to HMEIP had significantly increased on the total health modernity as well as on all the dimensions of health modernity. [0952]

VIJAYALAKSHMI, D. 1995. **Impact of transfer of agricultural technology on nutrition and health status of farm women and children (1-6 yrs.).** Ph.D., Home. Sc. Bangalore Univ. Guide: Prof. Nirmala Rao.

Problem: The study centred upon the impact of transfer of modern agricultural technology on health and nutrition of women and children.

Objectives: (i) To study the impact of women and youth training extension project, (ii) to determine the role played by farm women in agriculture and sericulture related activities, and (iii) to compare the dietary pattern, health status and nutritional status of beneficiary and non-beneficiary women.

Methodology: The sample comprised 500 women of which 250 were beneficiaries and 250 were non-beneficiaries having atleast a child of 1-6 years of age. These subjects were from the selected villages of Bangalore City. The information was collected on socio-economic factors, dietary intake, health and nutritional status of women and children. The data were analysed statistically using chi-square and multiple regression.

Major Findings: (1) The socio-economic conditions of the beneficiary families were found to be better than that of non-beneficiary families. (2) A significant difference was observed on the impact of training on knowledge and adoption level of recommended practices of agriculture and sericulture enterprise between the groups. (3) Income from agriculture and sericulture was more in case of the beneficiary families. (4) Diet survey showed that the nutrient intake of majority of farm women in beneficiary group was better than non-beneficiary group. Income had an impact on intake of nutrients in all the groups and other variables had moderate effect. (5) The morbidity status and nutritional

deficiency signs were observed more among the non-beneficiary women. The anthropometric measurements of the beneficiary were found to be better than that of non beneficiary women. (6) Association between socio-economic factors and income had significant effect on nutritional status of women. (7) Regarding the dietary intake of children the diet of 1-3 years and 4-6 years of children of beneficiary were better than the non-beneficiary group. (8) When children were classified using weight for height, height for age according to waterflow classification the percentage of children of beneficiary group were relatively normal than non-beneficiary group. [0981]

MORAL, ART AND AESTHETIC EDUCATION

MATHUR, MADHU. 1994. **Spontaneous art of high and low achievers.** *Indian Educational Review*, Vol. XXIX(1,2), 89-93.

Problem: It attempts to use spontaneous art as a tool in differentiating high and low achievers.

Objectives: (i) To locate specific art patterns associated with high and low achievers, (ii) to find out the difference in characteristics of spontaneous drawing of boys and girls with respect to their level of achievement, sex, area of academic study, and social background, (iii) to locate the characteristic features of spontaneous drawings of high and low achieving school-going boys and girls, and (iv) to develop a tool for evaluating spontaneous drawing (including a suitable blank and marking scheme).

Methodology: The sample comprised 360 boys and girls picked from the merit list declared by Board of Secondary Examination, 1987. They ranged in their age between 15-16 years. The first 30 in each subject area were included among the high achievers, while the failures and lowest achievers comprised the low achievers group. Tools used included Personal Data Record Blank, Analysis Blank for Scoring spontaneous drawing involving: Theme of drawing, Proportions, Dimension effect, Rendering technique, Use of provided space, Strokes like smooth, heavy, light, continuous, broken connected, aesthetic, etc., and Verbalisations, if

any, apart from paper and pencil. Spontaneous drawings used in this study were the final products collected from the subjects, drawn by black pencil on the surface of the drawing paper (white) without any restrictions, regulations, guidance help and assistance. After collecting ten spontaneous drawings from the children the whole analytic procedure which was to follow was based on a sound scientific approach. Each of the ten drawings prepared by individuals was scored by placing dots in the respective place assigned to it. When all the drawings were thus scored, the scores were summed up for observed categories, representing the final scores of a particular subject. The data were also analysed qualitatively to make the quantitative results more illustrative and understandable.

Major Findings: (1) Spontaneous drawings can be used to identify high and low achievers. (2) There were specific drawing characteristics in the work of boys and girls which distinguished them as such. (3) Areas of study to influence the art of boys and girls (as suggested by the typical art behaviour of science, art and commerce groups). (4) Components of spontaneous art seemed to have an understandable relationship with sex, and the group to which the artist belonged. (5) Spontaneous drawings of high achievers were characterised by natural scenes and isolated flowers, diagrams, human figures with associated movement, stray birds, acceptable proportions, central placement, use of almost all provided space, efforts at achieving 3 D, heavy strokes generally smoothed out. (6) Characteristic features reflected in the drawing of science students were, preference for human drawing in social context, humorous figures, cartoons, associated movement diagrams, social scenery, efforts at composing, central placement, heavy lines, correction of lines and smoothening of strokes, traces of aesthetics in strokes, and composition. (7) Characteristic features of the drawing made by arts students were portraits, isolated birds with decorative tendencies, flowers with decoration and shadings, traditional natural scenery, central placement of figures, excessive use of shading for delineation of parts and decoration, heavy and continuous strokes. (8) Characteristics of the drawing made by commerce students were frequent use of diagrams, designs, undesignated human and bird figures, utility orientatedness shown in the drawing of utility objects, traditionally learnt

natural scenes, diagrams, lack of organisation, aesthetics and composition, use of shading, and excessive use of heavy lines. (9) Effect of social background was perceptible in themes. (10) High achievers from town atmosphere and middle class families preferred to draw portraits of lawyers, doctors, engineers, market scenes, fairs, mountaineering, etc. Their female counterparts, however, drew portraits of teachers, examination hall, printing of textile articles, picnics, etc. (11) Natural scenes did not seem to show any marked deviation in themes but only in a few cases wherein town dwellers showed themselves to be more traditional in learnt figures of mountains, huts, rivers and flocks of birds. [1048]

SRIVASTAVA, ASHOK K. 1997. **Culture and human values: Continuity and change in the Indian society.** *Indian Educational Review*, Vol. XXXII(2), 69-91.

Problem: Present study is an attempt to explore parental views on the desirable human qualities.

Objective: To study the value system today's parents want their children to adopt and how it differs from the value patterns held by the elderly parents.

Methodology: The sample of the study comprised 360 participants (120 mothers, 120 fathers and 120 grandmothers of children below 10 years of age) from rural, urban and metropolitan background. Data were collected with the help of interviews and percentages were calculated.

Major Findings: (1) Parents gave first priority to individual-centred characteristics such as honesty and hard work, followed by socio-centric characteristics such as obedience, benevolence and truthfulness. (2) The characteristics such as disobedience, laziness, quarrelsomeness, greed and fear were deemed highly undesirable. (3) The rural parents counted greater number of desirable or undesirable characteristics showing their greater involvement with children's behaviour. (4) The grandmothers emphasised larger number of desirable characteristics whereas fathers focussed high on counting undesirable characteristics. [1094]

EDUCATIONAL TECHNOLOGY

AGARWALLA, SUNITA. 1998. **A study of the educational impact of Television on the social and moral development of the women in the Greater Guwahati area.** Ph.D., Edu. Gauhati Univ. Guide: Dr Parveen Akhtar.

Problem: To study if our TV programmes have in any way helped in the social and moral development of the women.

Objectives: (i) To study the present policy of the government regarding the TV programmes meant for women, (ii) to study the utility programmes like agriculture, veterinary, health, family planning, crafts and skills, functional literacy programmes among the different strata of women, (iii) to study different opinions regarding the status of women in the society as projected on TV shows, and (iv) to study the educational and training programmes of TV for women.

Methodology: Sample comprised 200 women chosen on random sampling basis. Questionnaire, Interview schedule and case study proformas were used to collect data. The collected data were treated qualitatively.

Major Findings: (1) TV made women aware of the social crimes committed against them, policies of the government for their upliftment, social problems like 'drugs' and 'AIDS'. (2) TV made them conscious of their rights. (3) Its impact was positive on the social and moral development of women and change in their status in society. (4) Moral values in the society had decreased after the coming of TV. (5) Showing of sex, violence and bad language on TV had a bad effect on the minds of the youth and children. [0974]

✓BALASUBRAMANIAN, N. 1993. **Correlation of teachers' classroom communication patterns and personality traits.** *Journal of Indian Education*, Vol. XVIII(5), 24-28.

Problem: This study attempts to identify the personality traits of the teachers which influence their communication patterns in the classroom.

Objectives: (i) To study the communication patterns of teachers teaching detailed English text in the classroom, and (ii) to identify the personality traits of the teachers which influence their different communication patterns in the classroom.

Methodology: The sample comprised 11 male and 4 female PG teachers teaching English at the higher secondary level in 15 schools in Coimbatore District. Tools used were modified version of Flander's Interaction Analysis Categories System and Cattell's 16 PF Questionnaire. Collected data were treated with mean, SD, 't'-test and correlation.

Major Findings: (1) Teachers who were socially outgoing, uninhibited and good at making and maintaining interpersonal contacts restricted pupil's participation in the teaching-learning process. (2) Teachers of high anxiety who were dissatisfied with the degree to which they were able to meet the demands of life and to achieve what they desired, encouraged pupil's participation in the teaching-learning process by accepting, clarifying, praising and developing the ideas and feelings expressed by the pupils. (3) Teachers with tough poise who were enterprising, decisive and resilient talked more and more in the classroom discussions but they were less dominant in the classroom. (4) Teachers who were aggressive, independent, daring, indecisive and exhibiting considerable initiative involved the pupils in the teaching-learning process. [1008] ✓

DATTA, S. 1998. An investigation into modification of teaching behaviour of upper primary science teachers through verbal interaction analysis feedback and its effect on scholastic achievement of pupils studying in Class VII of South Delhi schools. Ph.D., Edu. Jamia Millia Islamia. Guide: Prof. Devendra Joshi.

Problem: Present study is an attempt to study into the modification of teaching behaviour of upper primary science teachers through verbal interaction analysis feedback and its effect on scholastic achievement of pupils studying in Class VII of South Delhi schools.

Objectives: (i) To construct a classroom Interaction Analysis Scale for observing classroom

teaching of upper-primary teachers, (ii) to observe and assess the pattern of classroom interaction during science teaching, (iii) to provide necessary feedback treatment to teachers to help them to modify their teaching behaviour in order to institute interaction in the classroom for activity-centred classroom teaching of science, (iv) to assess the effect of feedback treatment on teaching behaviour in terms of modified communication pattern, and (v) to assess the effect of modified teaching behaviour upon student's achievement.

Methodology: Sample comprised four equivalent groups of students and four teachers teaching science at upper primary level drawn from one Kendriya Vidyalaya and one Delhi Public School situated in South Delhi. The tools used were Classroom Interaction Analysis Scale for Science (CIASSC) developed by the investigator, Raven's Advanced Progressive Matrices (RAPM) and achievement test in science (pre-test and post-test) developed by the investigator. Collected data were treated with mean, SD and 't'-test.

Major Findings: (1) In most of the classroom situations teachers followed direct influence, i.e., more of lecture, direction, criticism etc. (2) The questions asked by the teachers in between were mostly content oriented recall type, leaving little opportunity for students to develop power of reasoning. (3) Teachers seldom took help of experimentation or other activities to make the lesson interesting. (4) In many situations students were asked to read text from the books. (5) Students had shown mostly passive behaviour, i.e., responding to teacher's direction, lectures etc. (6) The scale prepared by the investigator supplied detailed information regarding many important events of the classroom teaching-learning process. (7) The treatment provided by the investigator based on observation and analysis of classroom interaction proved to be effective so as to bring modification in teaching behaviour which could be measured quantitatively and qualitatively. (8) Modification in teaching behaviour and classroom communication pattern had brought improvement in student's achievement. [1013]

KHEMCHANDANI, BEENA S. 1998. A study of the use of technological devices by academic counsellors at IGNOU study centres of

Ahmedabad District —A case study. *Journal of Higher Education*, Vol. 21(2), 273-277.

Problem: The present study attempts to find out the use of technological devices by academic counsellors at IGNOU study centres of Ahmedabad, Gujarat.

Objectives: (i) To study the extent of use of devices for educational technology by the academic counsellors who were participating in teaching at the Ahmedabad study centres of IGNOU, and (ii) to study the futuristic awareness about educational technology among the academic counsellors teaching at study centres of IGNOU.

Methodology: 37 academic counsellors at two IGNOU study centres of Ahmedabad were the subjects of the study. Questionnaire was administered to them and the collected data were treated with percentages.

Major Findings: (1) Simple technological devices like OHP, VCR, TV were frequently used by the academic counsellors, but nearly 30% of the respondents had never used even these devices. Nearly 50% of the respondents had never used TV's and VCR's in classroom teaching. (2) More than 90% of the respondents had never used CCTV and videotext in the classroom. None of the academic counsellors had used a slide projector, computer or any other aid for open learning material. (3) Academic counsellors in general were not satisfied regarding the use of E.T. because of low turn-out of students at the study centres. [0994]

MARTHANDAVARMA, K. 1998. **Effectiveness of instructional media in modifying cognitive and affective behaviour in prevention and control of Acquired Immuno Deficiency Syndrome (AIDS).** Ph.D., Edu. Bharathiar Univ. Guide: Dr. N. Balasubramanian.

Problem: The present study examines the effectiveness of instructional media in modifying the cognitive and affective behaviour in prevention and control of Acquired Immuno Deficiency Syndrome (AIDS).

Objectives: (i) To find out whether the effect of instructional media viz., Video, Audio, Slides, Posters and Lecture method are effective in modifying the cognitive and affective behaviour

among undergraduate students with regard to AIDS epidemic, (ii) to find out whether there is any significant difference between lecture method and different instructional media viz., Video, Audio, Slides and Posters in terms of their effectiveness in modifying the cognitive and affective behaviour among undergraduate students with regard to AIDS epidemic, (iii) to establish the relative effectiveness among different instructional media in modifying the cognitive behaviour and affective behaviour among undergraduate students with regard to AIDS epidemic, (iv) to find out the difference between lecture method and different instructional media in terms of their effectiveness in enhancing retention of cognition and attitude with regard to AIDS epidemic as measured by the retention test.

Methodology: The sample comprised 271 undergraduate students of which 241 students were assigned to experimental group and 30 students to control group. They were selected from seven arts and science colleges situated in the city of Coimbatore. The tools used were Interview Schedule, Criterion Referenced Test in AIDS Awareness, an Attitude Scale Towards AIDS Epidemic, and evaluation proforma developed by investigator. Besides this video, audio materials in AIDS awareness and, slides and posters dealing with AIDS epidemic were also used. The collected data were treated with mean, SD and 'F'-ratio.

Major Findings: (1) Instructional media was effective in achieving the instructional objectives in AIDS awareness programmes. (2) Different instructional media viz., video, audio and slides and lecture method were not effective in changing the attitude towards AIDS epidemic except poster as an instructional medium. (3) Different instructional media and lecture method differed among themselves in their effectiveness in modifying the cognitive behaviour in prevention and control of AIDS epidemic. Conventional lecture method was less effective compared to other instructional media. (4) Different instructional media differed among themselves in their effectiveness in enhancing retention of attitude towards AIDS epidemic among undergraduate students. (5) Audio (Tamil) was more effective compared to conventional lecture method, slides and posters in enhancing retention attitude towards AIDS epidemic among the

undergraduate students. (6) Significant difference was found between means of video (English) and video (Tamil) and audio (English) and audio (Tamil) on the scores of achievement in AIDS awareness as measured by the retention test. The mean value of the video (Tamil) was found to be greater than that of the video (English). (7) Results indicated that higher the level of achievement in AIDS awareness higher will also be the attitude towards AIDS epidemic, higher level achievement in AIDS awareness also influenced higher level retention of achievement in AIDS awareness and attitude towards AIDS epidemic. [1012]

RAINA, V.K. 1995. **Instructional media used by history teachers.** *Journal of Indian Education*, Vol. XXI(1), 29-34.

Problem: An attempt has been made in this study to find out the various types of instructional media being used by history teachers in the teaching-learning of history.

Objectives: (i) To know the different instructional media being used by a group of teachers in teaching history, and (ii) to know the main reasons from the teachers for not making use of different instructional media.

Methodology: Sample comprised 239 history teachers of these 189 were from the Government schools and 50 were from private schools drawn from urban, semi-urban and rural schools in the state of Rajasthan. A questionnaire developed by the researcher was used to collect the data. The collected data were qualitatively analysed.

Major Findings: (1) Except few teachers who used blackboard occasionally a majority of the sample used blackboard frequently. (2) 43% of the sample used map frequently and 57% of the sample used map occasionally. (3) Only 7% made use of source material such as coins, archaeological finds, documents, newspapers etc. Occasional use of such material was made by 45% of the sample followed by a large number of total sample who had never made use of these materials in their teaching. (4) Only 20% of the sample teachers made occasional use of the radio. Comparatively T.V. was being used by a greater number of teachers. (5) Textbooks and other written material had been put to greater

use by the teachers in their teaching. (6) Frequent use of enriched material for the talented students and remedial material for slow learners had been reported by 23% of the sample. (7) Single important reason for not making use of different instructional media was non-availability of different audio-visual aids/material and almost total lack of financial and other resources for the purchase. [1031]

SAHOO, P.K. AND MALLICK, P. 1995. **Attitude of rural primary school children towards ETV.** *The Primary Teacher*, Vol. XX(2), 17-21.

Problem: The present study is an attempt to assess the attitude of primary school children towards ETV.

Objectives: (i) To study the level of attitude of primary school children towards ETV, and (ii) to study the effect of level, technology acquaintance and sex background on student's attitude towards ETV.

Methodology: The sample comprised 90 students, 45 each from Class III and Class V. Self Constructed Attitude Scale and Technology Acquaintance Scale were used to collect the data. Mean, SD and 't'-test were calculated for analysing the data.

Major Findings: (1) There was no significant difference between the mean attitude scores of upper primary and lower primary stage students. (2) Technology acquaintance had significant effect on attitude of students towards ETV. (3) Sex background of students had significant effect on attitude towards ETV. [1000]

THAKER, MAHESH NARMADASHANKER, 1994. **Investigation into the effectiveness of linear programmed material and branching programmed material in the subject of economics for Standard XI in relation to certain variables.** Ph.D., Edu. *Gujarat Univ.* Guide: Dr. L.K. Patel.

Problem: It attempts to investigate into the effectiveness of linear programmed material and branching programmed material in the subject of economics for Standard XI in relation to certain variable.

Objectives: (i) To develop the programmed learning material (PLM) of the economics taught in

the Standard XI by following the linear and branching methods, (ii) to construct the achievement tests on the concept of the two chapters by following the standardization procedures, (iii) to compare the effectiveness of the linear and branching type of P.L.M., (iv) to compare the achievement scores of the pupils having high and low reading ability, high and low achievement motivation and different birth orders, (v) to compare the achievement scores of the pupils whose parent's educational levels are high and low, and (vi) to assess the interaction effects of the various independent variables on the achievement scores of the pupils.

Methodology: The sample comprised 1,200 students of XI Standard of 15 different schools of various zones of Ahmedabad City. The tools used for data collection were Reading Ability Test of Trivedi and Patel, Smith's Nache Test adopted by Patel and Dhanger and data sheets prepared by the investigator. The collected data were treated with ANOVA.

Major Findings: (1) The linear P.L.M. was found to be highly effective for achievement of all the levels of treatment. (2) Branching P.L.M. was found to be superior to textbook material but it was inferior in its effectiveness to linear P.L.M. (3) The textual material was found to be least effective reading material. (4) The trend test of the achievement scores across the three treatment levels (linear, branching and textual) revealed significant result. [0984]

TEACHING STRATEGIES

J. ALAM, M.S. 1997. **Effectiveness of inductive thinking and inquiry training models for teaching biology to the students of secondary schools.** Ph.D., Edu. Jamia Millia Islamia. Guide: Prof. Talat Aziz.

Problem: The study focuses on the instructional approach and comparative effectiveness of models for concept learning in biological science.

Objectives: (i) To study the effectiveness of inductive thinking model, inquiry training model and conventional method in developing the concepts in biology among the students of Class IX, (ii) to explore the comparative effectiveness

of inductive thinking model and inquiry training model, inductive thinking model and conventional method of teaching and inquiry training model and conventional method of teaching in terms of concept attainment in biology among the students of Class IX.

Methodology: The sample comprised 336 boys and girls drawn from 3 sections of Class IX from two schools. Section "A" of both the schools was treated as experimental group 1 (115), section "B" was treated as experimental group 2 (108) and section "C" was treated as control group (113). Tools used were group test of general mental ability by Jalota, Socio-Economic Status Scale by Chauhan, and Concept Attainment Test developed by the investigator. Collected data were treated with mean, SD and 't'-test.

Major Findings: (1) For concept learning and retention in biology, inductive thinking model and inquiry training model were more effective than conventional teaching method. (2) Inductive thinking model was more effective as compared to inquiry training model in terms of students' concept attainment in biology. [0980]

A CHAUDHARI, U.S.; VAIDYA, S.; NAVALAKHA, N.G. AND MAHAPATRA, B.C. 1999. **Effect of synectics model (SM), gaming strategy and traditional method upon self-concept, creativity and achievement.** *Perspectives in Education*, Vol. 15(1), 25-34..

Problem: The present study is an attempt to determine the effect of SM, gaming strategy (GS) and the traditional method of teaching upon the self-concept, creativity and achievement of the learners.

Objectives: (i) To study the effect of the SM, the gaming strategy and the traditional method treatments upon the self-concept of learners, (ii) to study the effect of the SM, gaming strategy and the traditional method treatments upon the creativity of learners, and (iii) to study the effect of SM, gaming strategy and traditional method treatments upon the achievement of learners.

Methodology: A sample of 162 learners of Grade VI were divided into two experimental and one control group drawn from a government school of Indore City. The tools used were Verbal

Intelligence Test (Hindi version) by Ojha and Chowdhary, Self-concept Rating by Pratibha, Test of Creative Thinking by Baquer Mehdi and Achievement Test by the investigator. For analyzing the data, mean, SD, 't'-test and ANOVA techniques were used.

Major Findings: (1) Three instructional treatments—the synectics model, the gaming strategy and the traditional method produced significant variations in the self-concept of learners. (2) No significant difference was found between the self-concept scores of groups exposed to the synectics model and GS. (3) The gaming and synectics model strategy treatment were found superior to the traditional method in enhancing the self-concept of learners. (4) The SM, the GS and the traditional method produced no significant variations on the mean gain creativity scores of learners, but it did produce significant variation among the mean achievement scores of learners of three groups. (5) No significant difference was found between the mean achievement scores of the synectics model and GM group of learners. (6) The gaming strategy and synectics model treatment was found superior to the traditional method on achievement scores. [0990]

KUMAR, AMRIT AND KAUR, HARVINDER. 1998. **Effectiveness of Inquiry Training Model in the development of process skills in geography in relation to cognitive style and personality types.** *Journal of Indian Education*, Vol. 24(2), 42-48.

Problem: The present problem is an attempt to study the effectiveness of Inquiry Training Model in the development of process skills in geography in relation to cognitive style and personality types.

Objectives: (i) To compare the effectiveness of Inquiry training model and conventional method of teaching for developing process skills in geography among students, (ii) to compare the effectiveness of Inquiry training model and conventional method of teaching for developing process skills in geography in relation to cognitive styles of the students, (iii) to compare the effectiveness of Inquiry training model and conventional method of teaching for developing process skills in geography in relation to personality types of the students, and (iv) to compare

the effectiveness of Inquiry training model and conventional method of teaching for developing process skills in geography in relation to cognitive styles and personality types.

Methodology: The sample comprised 400 female students of Class IX enrolled in Government Girls' Multipurpose Senior Secondary School, Model Town, Patiala and Government Victoria Girl's Senior Secondary School, Patiala. In order to collect the data, the tools used were Raven's Standard Progressive Matrices (RSPM), Sharma's Social Class Scale (SSCS), Group Embedded Figure Test (GEFT) by Witkin *et al.*, Eysenck Personality Inventory (EPI), Lesson Plans and a criterion test in geography. The statistical techniques employed for analyzing the data were the measures of central tendency, dispersion, t-test and ANOVA.

Major Findings: (1) The experimental group differed significantly better than the control group on the terminal behaviour supporting that the Inquiry Training Model was more effective for developing process skills in geography than the conventional method. (2) The experimental and control groups did not differ with respect to cognitive styles and personality on the development of process skills in geography. (3) The teaching technique and cognitive style did not have any interaction effect on the development of process skills in geography, and the same was true with personality type. [1131]

MISHRA, SUSANTI. 1996. **Traditional vs. competency-based teaching in environmental studies.** *The Primary Teacher*, Vol. 21(3), 93-98.

Problem: It attempts to compare the differences between the outcomes of pupils who have undergone the teaching in traditional approach and competency-based approaches.

Objective: To find out the difference between the gain scores of pupils taught by competency-based teaching approach and those of the students taught through traditional teaching approaches.

Methodology: The subjects of the study were taken from both the sections of Class V. The final sample consisted of 90 students of whom 45 were from section A and 45 from section B.

For collection of data of the learning outcome of the pupils of both the sections, achievement tests were used. This test was a criterion referenced test consisting of 30 items of questions, such as true or false, matching, fill in the blanks, and choose the correct words. Mean, SD, and 't'-ratio were used to treat the data.

Major Findings: (1) Competency based teaching approach along with child-centred learning and activity-based teaching showed a significant effect in achieving the gain scores on teacher-made test than that of traditional practice teaching. (2) Pupils taught through competency-based teaching exhibited significant gains which showed their change of behaviour in the learning outcomes. (3) Competency-based teaching strategy was proved to be best for classroom transaction. [0998]

TREHAN NEE KAUSHAL SHASHI. 1994. **Relative effectiveness of individualised and group instructional modules for teaching bio-sciences to Class IX.** Ph.D., Edu. *Punjab Univ.* Guide: Dr R.P. Goel.

Problem: The present study attempts to compare the effectiveness of individualised and group instructional modules for teaching bio-sciences to the students of Class IX.

Objective: To compare the effectiveness of the individualised and group instructional modules using three different approaches viz., Group Instructional Modules presented by teacher along with visual media (GIM-1), Group Instructional Modules comprising structured audio commentary and visual media (GIM-2) and Group Instructional Modules presented by teacher along with print media (GIM-3) in terms of achievement, retention, willingness and reaction while teaching bio-sciences to Class IX.

Methodology: A total of 198 students studying in Class IX, were selected randomly from the three schools of Ludhiana, which formed the sample of the study. The tools used to collect the data included Criterion Referenced Tests, Willingness Scale, Reaction Scale, Raven's Progressive Matrices and Kulshrestha's Socio-Economic Status Scale. The collected data were treated with 't' test and ANOVA.

Major Findings: (1) Group instructional modules

proved to be more effective than individualized instruction modules for improving scholastic achievement of the students. Results were positively correlated with the intelligence and retention of the students. (2) Out of the three group instructional modules, GIM-1 was found to be most effective improving the scholastic achievement of the students followed by GIM-3 and the GIM-2 which was found to be least effective. (3) All the students irrespective of intelligence showed more willingness and positive reaction towards GIM than individualized instructional modules. Out of the three group instructional modules, students showed more willingness and positive reaction towards GIM-1 followed by GIM-3 and GIM-2. [0953]

VANAJA, M. 1998. **A study of the inquiry training model in science teacher education programme.** Ph.D., Edu. *Nagarjuna Univ.* Guide: Dr T.J. Rajendra Prasad.

Problem: It attempts to study the willingness of teacher educators to implement Inquiry Training Model (ITM) and the student teachers' theoretical understanding, reaction and willingness to implement ITM.

Objectives: (i) To find out the willingness of the teacher educators to implement models of teaching, (ii) to develop training strategies with variations in sample size: large and small groups, and with variations in treatment variables: lecture, demonstration, theoretical orientation and group discussion, and (iii) to find out the effectiveness of training strategies in terms of student teachers: theoretical understanding of the model, and reaction towards model, and willingness to implement the model.

Methodology: The sample of the study consisted of 51 teacher educators who were selected through incidental sampling techniques from the nine teacher education colleges of Nagarjuna University. Apart from this, 233 student-teachers of teacher education colleges of Nagarjuna University were also selected through random sampling technique. Tools used to collect the data were Willingness Scale and Theory Checkup Reaction Scale. The collected data were analysed using 't' test, chi-square and ANOVA.

Major Findings: (1) The overall responses of the teacher to the willingness scale was positive.

(2) Both men and women teacher-educators had shown a similar response pattern to the willingness scores. (3) Teacher-educators with M.Phil, Ph.D., obtained a higher mean in the willingness scale than those with only P.G. Degree. (4) The teaching experience of the teacher-educators did not influence the trend of opinions expressed. (5) The teacher-educators who handled method courses obtained a higher mean in the willingness scale than those teaching foundation courses. (6) Teacher-educators who attended in-service programmes obtained a higher mean than those who did not attend. (7) There was a significant trend of opinion in teacher-educators on thirteen of the sixteen statements on the willingness scale. (8) The ANOVA on theory checkup scores on large and small group student-teachers revealed that there were no significant variations with regard to the training strategies. (9) There were no significant differences between the large and small groups in their theoretical understanding. (10) Only ten per cent of the student-teachers had secured low scores on the theory checkup. (11) The ANOVA reaction scores revealed significant variation in small and large groups, the tendency being a weightage towards the modular group. (12) There was no significant difference between the large and small groups in their reaction scores. Only nine per cent of the students had shown negative reaction. (13) The ANOVA on the willingness scores revealed significant variation in the large and small groups, the tendency being a weightage towards the modular group. (14) There were no significant difference between the large and small groups in their willingness scores. (15) Ninety five per cent of the student-teachers had shown willingness to use model. [0948]

TEACHER EDUCATION — PRE-SERVICE AND IN-SERVICE

ANNAMALAI, A.R. 1999. **A study of job satisfaction of teachers in relation to certain selected variables.** Ph.D., Edu. Annamalai Univ. Guide: Dr. (Mrs) Sarah Shantha Kumari Williams.

Problem: The present problem is an attempt to study the job satisfaction of teachers in relation to certain selected variables.

Objectives: (i) To study the job satisfaction of teachers, (ii) to study the teachers' attitude towards educational administration and teaching, and (iii) to study the level of adjustment of teachers.

Methodology: The sample consisted of 400 teachers working in different schools of Tamilnadu. The tools used were Job Satisfaction Scale, Attitude Towards Educational Administration Scale, Teacher Attitude Scale and Teacher Adjustment Inventory. The data were treated by descriptive and inferential statistics.

Major Findings: (1) Job satisfaction of teachers in high schools and higher secondary schools was high. (2) Teachers' attitude towards educational administration was high. (3) Attitude of teachers towards teaching was high. (4) Adjustment of teachers was high. (5) The job satisfaction scores of teachers were not found significantly different when compared on the basis of sex, education level, marital status, family structure, school level, age group and duration of service. [1099]

ARORA, G.L. AND SINGH, A. 1997. **Training of primary teachers.** *Journal of Indian Education*, Vol. XXII(4), 16-21.

Problem: Present study is an attempt to appraise the training designs developed by different DPEP states for primary teachers.

Objectives: (i) To assess the strengths and weaknesses of the training designs developed by different states, (ii) to provide a forum to the states to learn from experience of others, and (iii) to suggest ways and means to improve the quality of training designs.

Methodology: Guidelines were developed for the appraisal of training designs. Two workshops were organised — one at the NIE campus, New Delhi and other at the RIE, Mysore. Training designs developed by the states were appraised by the evaluators in the light of guidelines developed for the purpose.

Major Findings: (1) States had designed in-service education programmes for primary teachers, head teachers, heads of cluster resource centres (CRCs), coordinators, Block resource centres (BRCs), members of village education committees (VECs), faculty of DIETs and

SCERTs. Karnataka and Tamil Nadu were yet to set up cluster resource centres. (2) The study revealed that training needs of different functionaries were identified by states on the basis of (i) the experiences of SCERT/DIET faculty while working with primary teachers and other functionaries; (ii) findings of the baseline learning achievement studies conducted by the NCERT and the NIEPA, and interactions with concerned personnel. States had, however, not identified training needs of these functionaries by conducting research systematically. (3) States had not delineated explicitly objectives of training for different functionaries as revealed from their training designs. (4) The content of training of different functionaries had been identified by the states. It, however, differed from one state to another. (5) Most of the states had planned to provide recurrent training to primary teachers and other functionaries. (6) Activity-based approach, demonstration were the transactional approaches which were planned to be followed in the training of teachers. (7) Most of the states had drawn up plans to monitor and evaluate the quality of training by seeking trainees' perceptions at the end of the programme either through a questionnaire/and/or through interview. (8) The review of training designs developed by different states revealed that they had not paid adequate attention to the follow-up aspect of the training. [1040]

BIJAT, V.D. AND BAWANE, JYOTI. 1997. **A study of the discrepancy between the expected and actual outcomes of the primary teacher education programme.** *Indian Educational Review*, Vol. XXXII(2), 155-164.

Problem: Present study is an attempt to identify the nature and extent of discrepancy that exists between the competencies considered to be developed among the teacher-trainees and those which the teacher educators claim to have developed through the teacher education programme.

Objectives: (i) To identify the competencies claimed by the teacher educators as developed among the teacher-trainees through the teacher education programme, and (ii) to identify the extent to which the competencies are consid-

ered to be attained by teacher-trainees through the teacher education programme.

Methodology: The sample consisted of 16 teacher educators, who were involved in the pre-service training of elementary school teachers of the DIET, Mysore. Data were collected with the help of interview and were treated with frequencies and percentages.

Major Findings: (1) Comparing the list of competencies expected to be developed and those actually developed among the trainees, a considerable discrepancy had been observed. (2) The training input provided in the teacher education programme even when the teacher educator expected to develop a competency was either inappropriate or insufficient for the purpose. (3) Of the seven categories four categories, namely, planning and preparation, interpersonal, community related and research competencies were such that none of the competencies listed under them were perceived as attained by the majority of the teacher-trainees. (4) Of the remaining three categories which actually accounted for 74% out of the total competencies listed, 14 % of the competencies were not attained by the majority, 26% of the competencies were attained by the minority and 34% competencies were attained by the majority. [1067]

CHOPRA, R.K. 1998. **A study of working conditions of primary school teachers in Haryana.** Independent study. National Council of Educational Research and Training.

Problem: The study centered upon the working conditions of primary school teachers in rural and urban areas of Haryana.

Objectives: (i) To study and compare the working conditions of primary school teachers in rural and urban settings, and (ii) to suggest remedial measures to improve the working conditions of teachers.

Methodology: The sample comprised 180 teachers of 20 primary schools — 10 situated in rural areas and 10 in urban areas of Ambala and Sirsa Districts. The tools developed and used were School Information Schedule, Teacher Working Conditions Questionnaire, Teacher Professional Anxiety Scale, Interview Schedules and Obser-

vation Schedule. The collected data were treated with mean, SD, 't'-test and percentages.

Major Findings: (1) Teachers working in rural schools devoted more time to reach to their place of work than their urban counterparts. (2) Urban schools did not differ from rural schools with regard to instructional materials, audio-visual aids and equipment, library facility and level of teacher's professional anxiety and job satisfaction. (3) No performance linked incentives scheme was available for teachers. There was no systematic transfer policy in the state. [0985]

GUPTA, S.P. 1993. **Role conflict among teachers and some biographical variables.** *Journal of Indian Education*, Vol. XVIII(6), 37-41.

Problem: The present study investigates the relationship between particular categories of teachers in terms of sex, age and teaching level and overall role conflict.

Objective: To study the relationship between the various groups of teachers classified by role conflict broadly defined in terms of high and low.

Methodology: By employing multistage cluster sampling, 140 male and female teachers were selected. Out of these 41 were primary, 62 secondary and 37 were university teachers; drawn from a town of U.P. Role Conflict Opinionnaire devised by the investigator was administered on subjects. Collected data were treated with chi-square.

Major Findings: (1) Male teachers were associated with high role conflict than female teachers. (2) Middle-aged teachers perceived and experienced significantly more conflict than younger and older teachers. (3) Teachers in secondary schools perceived significantly more role conflict than did their colleagues in primary schools and universities. [1004]

GHANANI, T.C. 1998. **Stress and strain among the teachers working in higher education institutes of different organizational climate.** *Indian Journal of Psychometry and Education*, Vol. 29(1), 53-59.

Problem: To study the impact of organizational climate on stress and strain among the teachers working in higher education institutes.

Objectives: (i) To know how far the teachers working in colleges and universities are stressful and strained under their managerial and administrative set up of the leaders of the institutes, and (ii) to examine certain dimensions of the academic work environment and organizational set-up (climate) which may contribute to, or alleviate dysfunctional stress and strain among academicians.

Methodology: A sample of 200 teachers were selected by using accidental sampling technique from the various graduate and post-graduate level of educational institutions of Agra and Firozabad Cities. Two questionnaires namely Higher Education Organizational Climate and Occupation, and Stress and Strain Test (developed by the researcher) were used as tools to collect the data. The collected data were treated with analysis of variance.

Major Findings: (1) The organizational climate of the institutions played a significant role in creating stress and strain in the teachers. (2) The teachers who were working in closed or controlled type of organizational climate remained tense and developed some physiological as well as psychological deformities in their body, while the teachers working in autonomous or open type of organizational climate remained mentally happy and healthy. [1121]

JANI, H.B. 1998. **Secondary education trainees' preconceptions of teaching.** Ph.D., Edu. Bhavnagar Univ. Guide: Dr. Chandrakant Bhogayata.

Problem: This study addresses teacher education trainees' expectations about future teaching performance, their explanations for their predictions, and their descriptions of good teaching.

Objectives: (i) To find out the secondary education trainees' preconceptions of good teaching, expectations of their future teaching performance and explanations for their self-ratings, and (ii) to compare the trainees' conceptions of good teaching with those of secondary school teachers.

Methodology: The sample of the study comprised 292 B.Ed. trainees (150 male and 142 female) who were selected from 4 colleges using

stratified random sampling technique. Out of four colleges, two colleges belonged to Saurashtra University and one each belonged to Bhavnagar and Gujarat Universities. Apart from this, 137 secondary school teachers were also selected randomly from the area of B.Ed Colleges. The tool used was a questionnaire constructed by Weinstein (translated into Gujarati by the investigator). Percentage, mean, standard deviation, correlations and chi-square were used to treat the collected data.

Major Findings: (1) Secondary education trainees (82.88%) predicted that their future teaching performance would be above average. (2) The trainees believed that their instruction, organization and management and inter-personal relationship would be much better in future. (3) Trainees mentioned, their self-confidence and commitment to teaching were the most important factors for their future teaching. (4) According to trainees the most important attributes for good teaching were commitment to teaching, high I.Q., patience and organizational skills. (5) Trainees most frequent responses to conceptions of "a really good teacher" had to do with knowledge of subject matter, knowledge of method and responsibility. (6) The secondary school teachers and the trainees both most frequently mentioned knowledge of content and responsibility for a really good teacher. (7) For a good teacher, secondary teachers gave more importance to movability and creativity than trainees significantly and trainees gave more importance to meeting students' needs and fulfilled them, verbal-non-verbal interactions and willingness to give extra time than secondary teachers significantly. [0947]

MATTOO, B.K. 1993. **Identification of teachers' problems.** *The Primary Teacher*, Vol. XVIII(1), 29-34.

Problem: The study attempts to identify the problems of teachers in single/two teacher primary schools.

Objectives: (i) To assess the present position in infrastructural facilities in the school, (ii) to assess the utilisation of essential facilities provided to the schools of primary classes under Operation Blackboard Scheme, (iii) to seek the opinion of teachers in the development of

skills in language, mathematics and environmental studies among their children by the end of class, (iv) to assess the parent and community relations of teachers in solving school problems, (v) to know about the teacher's attitude towards the pupil, classroom teaching and teaching professionals, (vi) to find the difficulties of teachers in teaching-learning strategies of the multigrade teaching, (vii) to assess the frequency and nature of school inspection, and (ix) to know about the problems of teachers like transfer, personal health, administration and facilities at the place of posting.

Methodology: The sample for the study comprised 642 single/two teacher primary schools of 16 districts from three states of Bihar, Madhya Pradesh and Rajasthan. A comprehensive questionnaire was prepared for data collection. Data were analysed with the help of percentage.

Major Findings: (1) A majority of schools were functioning in partly *pucca* and *kachha* buildings. (2) A majority of schools were not having drinking water facility, school-ground facility, school furniture, boxes/trunk, school contingency funds, incentive schemes and school medical check-ups. (3) Approximately half of the schools were not having adequate black boards and library facilities. [1002]

MOHAN, RADHA. 1997. **Teaching effectiveness of physical science teacher-trainees and certain selected variables.** *Indian Educational Review*, Vol. XXXII(1), 13-35.

Problem: Present study is an attempt to examine the teaching effectiveness of physical science teacher-trainees using an explanatory causal model.

Objectives: (i) To study the important correlates of teaching effectiveness, and (ii) to revise conceptual path model of teaching effectiveness.

Methodology: Sample of the study comprised 48 teacher-trainees, enrolled at the Stella Matutina College of Education, which had physical science as one of their optional subjects. The tools used were Avinash Grewal's Science Attitude Scale (SAS), Kakkar Interest in Teaching Scale, a Descriptive Scale devised by the investigator, College office records for academic achievement, and Rating sheet for teaching effectiveness

SHARMA, YADAVENDRA K. AND KUMAR, NARESH. 1993. **Relative importance of teaching skills : Views of secondary school teachers.** *Journal of Indian Education*, Vol. XVIII(6), 30-36.

Problem: Present study is an attempt to determine the relative importance of various teaching skills in terms of preferences of practicing teachers.

Objectives: (i) To identify the relevant teaching skills suitable for effective teaching at the secondary stage, (ii) to determine the relative importance of various teaching skills, (iii) to identify a cluster of three teaching skills viewed as the most important by the practicing teachers, and (iv) to identify a cluster of three teaching skills viewed as the least important by the practicing teachers.

Methodology: A sample of 300 teachers was drawn from 36 secondary schools situated in three districts of Himachal Pradesh. A tool containing 15 stimuli representing the teaching skills was prepared by the investigator. The method of paired comparison was used to analyze the data.

Major Findings: (1) Promoting pupil's participation had been viewed as the most important teaching skill at the secondary level teaching. This was followed by the skill of using teaching aids, questioning, explaining, evaluating, giving assignment, lesson planning, introducing lesson, classroom management, reinforcement, writing instructional objectives, stimulus variation, set induction, pacing the lesson and closure. (2) Three teaching skills which had been viewed by the teachers as the most important were : Promoting pupil's participation, using teaching aids and questioning. (3) The three teaching skills which had been viewed as the least important by the teachers were: Set induction, pacing the lesson and closure. [1003]

SINDHE, A.S.N.RAO. 1997. **Demographic and familial correlates of anxiety and general perceived stress among teachers.** *Experiments in Education*, Vol. XXV(11), 211-223.

Problem: It attempts to study the demographic and family variables related to teacher's anxiety and perceived stress and to compare the

relationship between anxiety and perceived stress.

Objectives: (i) To identify the demographic and family variables related to teacher's anxiety, (ii) to identify the demographic and family variable related to teacher's general perceived stress (GPS), and (iii) to compare the relationship between anxiety and GPS with respect to certain socio-demographic and family variables.

Methodology: Sample comprised 1,560 elementary school teachers from various elementary schools of Mysore. The tools used were Anxiety Scale, General Perceived Stress Scale and Demographic Profile. The data were analysed by applying descriptive statistical techniques, Pearson's correlation and multiple regression analysis.

Major Findings: (1) Teacher anxiety was significantly related to 'twelve' socio-demographic and 'seven' family variables. It was observed that highly stressed teachers were highly anxious too, whereas less stressed teachers were less anxious. (2) Female teachers had greater GPS than their male counterparts. (3) Teaching in both the medium resulted in greater stress than teaching through one medium only. (4) People with poor personal and poor family health were found to have greater GPS than those with good health. (5) Unsatisfactory relationship with spouse, parents, parents-in-law and children was associated with greater GPS among the teachers. (6) Male and female teachers reported different levels of anxiety in the present study. (7) Young teachers had greater anxiety than old teachers. (8) People who devoted less time for academic work were more anxious than people who had adequate time for it. (9) People working in urban schools had greater anxiety than their counterparts in rural schools. (10) Teachers working in private schools, drawing inadequate salary and who could not easily give up the job seemed to experience severe anxiety. [1055]

SWAIN, S.K. 1996. **Differential factors in academic success of science and humanities teacher-trainees of B.Ed. course.** Ph.D., Edu. Utkal Univ. Guide: Prof. K.K. Das.

Problem: This study addresses the problem of evaluation of the factors responsible for the

academic success of the Bachelor of Education course.

Objectives: (i) To study the independent effect of each of the cognitive factors on academic success of teacher-trainees in Science and humanities categories of B.Ed. course, (ii) to study the independent effect of each of the non-cognitive factors on academic success of teacher-trainees in science and humanities categories of B.Ed. course, and (iii) to examine the pattern of relationship among different factors of cognitive and non-cognitive, as a function of academic success of B.Ed. course.

Methodology: The sample comprised 300 teacher-trainees, 150 each from science and humanities categories from 5 colleges of teacher education. Tools used were Raven's Standard Progressive Matrices, Differential Aptitude Test, Teacher Attitude Inventory (Ahluwalia) and Kuppuswamy's Socio-Economic Status Scale. The collected data were treated with mean, SD, ANOVA, and correlation.

Major Findings: (1) The science teacher-trainees differed significantly from humanities in their academic success. (2) The interaction between category and verbal reasoning influenced significantly the academic success of the teacher-trainees in the B.Ed. course. (3) The effect of abstract reasoning on academic success of both science and humanities teacher-trainees was very significant. (4) Language usage influenced the academic success of both science and humanities teacher-trainees significantly. (5) The effect of SES on academic success of science and humanities teacher-trainees was significant. (6) The effect of intelligence, verbal reasoning, numerical ability, attitude and sex on academic success of both science and humanities teacher-trainees were not found significant in B.Ed course. [0975]

SWAMY, S. SRIKANTA. 1995. **An impact of a programme of critical thinking skills on the achievement of secondary school teacher-trainees of Bangalore City.** Ph.D., Edu. Bangalore Univ. Guide: Prof. T.K. Jayalakshmi.

Problem: It attempts to assess the impact of a programme of critical thinking skills on the achievement of secondary school teacher-trainees of Bangalore City.

Objectives: (i) To develop a tool to measure critical thinking skills among the secondary school teacher-trainees of Bangalore City, (ii) to develop a programme of critical thinking based on methods of teaching physics, (iii) to construct a test to measure achievement of secondary school teacher-trainees in methods of teaching physics, (iv) to ascertain the extent of critical thinking skills (CTS) developed among the secondary school teacher-trainees due to the programme, CTS, (v) to study the impact of the programme of CTS on the achievement of secondary school teacher-trainees in methods of teaching physics, and (vi) to find out the interaction of sex, intelligence, SES and CTS on the achievement of secondary school teacher-trainees in methods of teaching physics.

Methodology: The sample comprised 125 teacher-trainees who have taken methods of teaching physics and studying in four aided colleges of education. Tools used to collect the data included, Raven's Progressive Matrices, Socio-Economic Status Scale of Kuppuswamy, Achievement Test, and a Tool of Critical Thinking Skills (TOCTS). The collected data were analysed statistically using percentile, mean, SD, 't' test and ANOVA.

Major Findings: (1) Male and female trainees did not differ in their CTSs after the implementation of the programme of the CTS. (2) SES had not been a significant factor in influencing achievement based on the development of CTS. (3) Intelligence had interacted with CTS. (4) Component wise analysis of POCTS on achievement showed that only three components influenced the achievement. [0960]

THAKER, M.J. 1996. **A study of job satisfaction among the principals of secondary schools of Saurashtra.** Ph.D., Edu. Bhavnagar Univ. Guide: Dr. K.U. Lavingia.

Problem: This study aims to study the job satisfaction among the secondary school principals of Saurashtra.

Objectives: (i) To study the job satisfaction among the secondary school principals of Saurashtra, and (ii) to study the relationship between principal's job satisfaction and gender, age, experience, qualification, marital status, type

of schools, residential area, and geographical locale.

Methodology: The sample of the present survey consisted of 900 secondary school principals from Saurashtra region in Gujarat. For data collection, a self-constructed Job Satisfaction Scale was used. Mean, SD, 't'-test and 'chi'-square were calculated to analyse the collected data.

Major Findings: (1) The attitude towards job satisfaction among the most of secondary school principals of Saurashtra was classified as neutral. (2) The secondary school principals having experience of 9-16 years were more satisfied and the principals having experience of 0-8 years were least satisfied. (3) The post basic secondary school principals were more satisfied than ordinary secondary school principals. (4) The principals of the schools with higher secondary sections were more satisfied than the only secondary school principals. (5) Among the matters under consideration, the job satisfaction of secondary school principals of Saurashtra did not differ when gender, age, educational qualification, marital status and geographical area were considered. [1107]

VOCATIONAL AND TECHNICAL EDUCATION

KRISHNAN, AHALYA AND SWEENEY, CHRISTOPHER J. 1997. **Asian vs non-Asian differences in achievement-related background variables of medical students.** *Psychology and Developing Societies*, Vol. 9(2), 189-224.

Problem: This study investigated differences in Asian and Non-Asian medical students in terms of achievement-related background variables.

Objectives: (i) To compare Asian and non-Asian medical students in terms of their representation in the medical science area, (ii) to compare resultant achievement motivation (RAM) and fear of success imagery (FOS) of Asian and non-Asian medical students, and (iii) to study the variables which differentiate the two groups of students.

Methodology: Students enrolled in the first two

years of a 6-year BS/MD programme in the three midwestern universities constituted the sample for this study. The tools used to collect the data were Measure of Achieving Tendency developed by Mehrabian, Categories developed by Harner *et al.*, a scale based on Krathwohl's Affective Domain of "Re-ception to Organisation" and a self-developed questionnaire for collecting information about the entry demographic, home and achievement related variables. The collected data were treated qualitatively.

Major Findings: (1) Asian-Americans seemed to be more attracted to science dominated areas. (2) The Non-Asians exhibited greater fear of success imagery but scored less on Resultant Achievement Motivation (RAM) than Asians. (3) The two groups differed from each other in terms of parents' educational and professional level, monthly allowance for chores, minimising chores before tests, hours spent in earning money during high school years and in dating activities, parental participation in educational and vocational decisions, time spent with babysitters when young, parental acceptance of non-medical programme entry and parental support in intrinsically motivated individuality. [1130]

SWAIN, BIMAL CHARAN AND KOUL, LOKESH. 1995. **Socially useful productive work programme at the secondary stage: A study.** *Journal of Indian Education*, Vol. XXI(1), 46-52.

Problem: The present investigation aimed at studying the functioning of the SUPW programme and suggesting measures for its effective implementation at the secondary stage in Himachal Pradesh.

Objectives: (i) To study the functioning of the SUPW programme at the secondary stage in Himachal Pradesh, and (ii) to suggest measures for the effective implementation of the SUPW programme at the secondary stage in Himachal Pradesh.

Methodology: The sample of the study consisted of sixty craft teachers and other teachers providing instruction in SUPW activities selected through purposive sampling technique from 33 government high/senior secondary schools of five districts of Himachal Pradesh, namely Shimla, Solan, Bilaspur, Una and Kinnaur. A

questionnaire prepared by the investigators was administered on the subjects. Collected data were qualitatively analysed.

Major Findings: (1) Community service was not performed under SUPW in 64% of the schools. (2) All the teachers reported that their schools did not have adequate physical facilities for various SUPW activities. (3) About 40% of the teachers imparting instruction in SUPW activities were matriculates and more than 60% of the teachers did not have any technical or professional qualification in SUPW activities. (4) All the teachers stated that there was no provision of orientation courses and refresher courses for them at the State level. (5) All the teachers reported that instructional materials on SUPW in terms of source books, guide books, doing-learning units, unit plans, resource units and manuals, etc. were neither published nor available in the state. (6) 97% of the teachers stated that leisure time was not utilised for SUPW in their institutions. (7) There was no SUPW cell in the SCERT of Himachal Pradesh. (8) All the teachers reported that no financial assistance was provided to their institutions by the State Government for the SUPW programme. (9) 22% of the teachers reported that no articles were prepared by the students of their institutions under the SUPW. (10) Four per cent of the teachers reported that the products of SUPW were sold to the local community. (11) A large majority of teachers reported that the local community/parents were not involved in SUPW programme in their institutions. [0987]

SPECIAL EDUCATION

AGARWAL, SUMAN AND SHARMA, SWETA. 1998. **Extent and nature of problem behaviours among deaf and dumb children.** *Praachi Journal of Psycho-cultural Dimensions*, Vol.14(2), 135-137.

Problem: It attempts to study the extent and nature of problem behaviours among deaf and dumb children.

Objectives: (i) To determine the personal and socio-economic profile of children attending special school for deaf and dumb children, and (ii) to assess the extent and nature of problem behaviours among deaf and dumb children.

Methodology: The sample comprised 100 children from Classes I to X who were selected from Government school for deaf and dumb located in Agra. The tools used to collect the data were self-made inventory to assess the problem behaviours among children and a socio-economic profile. The researcher has used descriptive and inferential statistics to treat the data.

Major Findings: (1) Mostly children were from urban area, male in between 7-12 years of age, had severe level of deafness and belonged to small sized nuclear Hindu families of middle socio-economic status. (2) Majority of the deaf and dumb children had shown frequent problem behaviours. [1135]

BINDU, C.M. 1998. **Self-concept and socio-personal adjustment of hearing impaired and normal secondary school students.** *Experiments in Education*, Vol. XXVI (3), 3-6.

Problem: This study is an attempt to compare the self-concept and socio-personal adjustment of hearing impaired secondary school students with those of the normal students.

Objective: To find out whether there is any significant difference in the mean scores of self-concept and socio-personal adjustment between hearing impaired and normal secondary school students.

Methodology: The sample comprised 323 hearing impaired and 322 normal secondary school students of Kerala State. They were administered Kerala Self-Concept Scale and Kerala Socio-Personal Adjustment Scale by Nair. Test of significance of difference between means of large independent samples was used for data analysis.

Major Finding: Self concept, Social adjustment, Personal adjustment and Social-personal adjustment of hearing impaired were found to be significantly different from those of the normal school students. [0969]

CHATURVEDI, SHUBHRA. 1999. **Prolonged deprivation as determinant of personality and mental health of visually impaired children.** Ph.D., Edu. *Dayalbagh Educational Institute*. Guide: Dr. K.C. Vashistha.

Problem: The present study attempts to explore the extent of influence of prolonged deprivation on the personality and mental health of visually impaired children (VIC).

Objectives: (i) To compare low, moderate and high deprived levels of visually impaired children (VIC) on different areas of prolonged deprivation, (ii) to compare congenitally and adventitiously VIC on different areas of prolonged deprivation, (iii) to explore the extent of influence of prolonged deprivation on the personality factors of VIC, (iv) to find out correlation between areas of prolonged deprivation and dimensions of mental health of VIC, and (v) to analyse the interaction of the prolonged deprivation and mental health on the personality factors of VIC.

Methodology: The sample comprised 150 visually impaired children from special schools situated at Delhi, Dehradun, Lucknow and Aligarh. The Braille transcribed version of the tools used in the present study were self constructed General Information Questionnaire, Cattell's Sixteen Personality Factors Questionnaire, Prolonged Deprivation Scale of Mishra and Tripathi, and Mental Health Inventory of Jagdish and Srivastava. Mean, SD, 't'-test, correlation and two-way ANOVA were the statistical techniques used in the present study.

Major Findings: (1) It has been found that low, moderate and high levels of deprived VIC were significantly different on all areas of prolonged deprivation. (2) The congenital and adventitious groups of VIC did not differ on prolonged deprivation. (3) Congenital group of highly deprived VIC were more intelligent, apprehensive, tense and practical, while congenital and low deprived VIC were more happy-go-lucky and forthright in nature. Further, adventitious group of moderately deprived VIC were more imaginative, shrewd while adventitious and low deprived VIC were more conservative and affected by feelings. (4) Prolonged deprivation was negatively correlated with positive self evaluation, integration of personality and total mental health of VIC but positively correlated with perception of reality. (5) Low deprived VIC with low status of mental health were dull and experimenting in nature, while low deprived VIC with high status of mental health were more reserved and forthright. It has been found that highly de-

prived VIC with high status of mental health were more suspicious and practical. Moreover, VIC with poor mental health were more sober and affected by feelings, while moderately deprived VIC with high status of mental health were more shy than their counterparts. [1128]

CHOPRA, GEETA. 1998. **Module for training anganwadi workers for early detection of childhood (0-6 yrs.) disabilities: Development and assessment.** Ph.D., Home Sc. Univ. of Delhi. Guide: Dr P. Seetharaman.

Problem: The study assesses the possibility of developing and assessing an innovative training module, a self-contained package of learning for grassroots level community worker, i.e. the Anganwadi Workers (AWW), to impart necessary knowledge and skills to undertake the task of prevention and early detection of disabilities amongst children in their area.

Objectives: (i) To prepare and collect suitable teaching and training aids for AWW for imparting information on causes, prevention and detection of disabilities in children, (ii) to develop suitable screening test which would help in detecting children with a disability, impairment or who are 'at risk' of acquiring one, (iii) to collect information on agencies offering educational, medical and rehabilitative services for the disabled, (iv) to plan a practical, field based training programme which would increase the knowledge on causes, nature, prevention and detection of disabilities in children, impart skills to trainees which would help them to detect disabilities in children, increase awareness about referral agencies for intervention for children with suspected disability, (v) to conduct a training of the selected anganwadi workers according to the programme planned above, (vi) to assess the impact of the programme on knowledge, and, (vii) to assess the impact of the programme on the screening skills acquired by the trainees.

Methodology: Using purposive sampling technique 19 Anganwadi Workers from two ICDS projects of South Delhi, screened 3,560 children in the age range of 0-6 years. Finally, they could screen 536 normal children and 219 impaired/disabled children. Disability Screening Schedule was used as a tool. Collected data were

treated with percentages and chi-square.

Major Findings: (1) The knowledge test administered as a pre-test and post-test, before and after the training course showed an average knowledge gain of 27% for 19 trainees. (2) Of the 3,560 children (0-6 yrs.) screened in 9 urban slums of South Delhi by the trained AWW, 245 were screened as having an impairment/disability. (3) On comparing the rate of impairment between the 0-1 year and 5-6 years age group, impairment was found to be significantly higher in the older age group. (4) Mother's education above Standard X was a significant factor in reducing the chances of impairment in children. (5) Results showed that the trainees were able to identify impairment free children accurately in 93% cases. They could screen children with impairments accurately in 95% cases. (6) The validity of the Disability Screening Schedule (DSS) was assessed. The specificity of the DSS was found to be 0.98, implied that if the DSS screens the 0-6 yr. old child as impairment free, there was a 0.98 probability of the child being normal. The sensitivity of the DSS was found to be 0.89. This implied probability of the DSS screens the child as having an impairment, there was a 0.89 probability of the child having an impairment. [0955]

GEETHA, T. 1998. **Efficacy of remedial package in augmenting primary school teachers' skill to help dyscalculic children.** Ph.D., Edu. Avinashilingam Institute for Home Science and Higher Education for Women. Guide: Prof. N. Jaya.

Problem: The study focussed on developing a remedial package and assessing its efficacy for teachers use to help children with difficulties in arithmetic.

Objectives: (i) To sensitize primary school teachers towards children with learning disabilities, (ii) to identify dyscalculic children among the scholastically backward, (iii) to evolve and implement remedial intervention programme for dyscalculic children, and (iv) to evaluate the efficacy of the remedial package developed.

Methodology: The present study is conducted in three phases. Phase I, i.e., Sensitizing Primary School Teachers on Learning Disabilities among Children, which covered 150 teachers

for assessing teachers' awareness on learning disability, 130 participants for organizing sensitization programme for teachers and 19 teachers for conducting orientation programme for selected teachers. The Phase II, i.e. Identifying Dyscalculic Primary School Children, which covered 1,442 students for assessing academic performance of primary school children, 115 students for screening low achievers in mathematics and 65 students for identification of children with difficulties in mathematics. In Phase III, i.e., Evolving Remedial Programme and Package for Dyscalculic Children, which covered 36 students for developing remedial programmes, and 18 students for using the remedial programme. The tools used to collect data included questionnaire, check-list, Raven's Coloured Progressive Matrices, Arithmetic Diagnostic Test for Primary School Children by Rama, Behavioural Checklist for Screening the Learning Disabled by Swarup and Mehta, personal data schedule for pupils and Diagnostic Test for Learning Disability by Swarup and Mehta. The statistical techniques used to treat the data were percentage, proportion test and 't' test.

Major Findings: (1) Academic performance of 1,442 primary school children (Standard I to V) indicates that there was 20% low achievers in mathematics at Class I level and it rose to more than 25% in Classes II, IV and V. (2) It was found that the proportion of girls and boys securing a score of less than 40 in English, language, science and mathematics revealed significant difference at one per cent level only in case of language among girls. (3) Arithmetic diagnostic test administered to the low achievers in mathematics revealed that almost 55% had problems in basic arithmetic skills, 19% made inconsistent responses while 17% of them had difficulty in performing higher order tasks. (4) The effectiveness of the remedial programme assessed using Arithmetic Diagnostic Test revealed significant difference among the control and experimental groups the later achieving higher mean scores. (5) The difference in control and experimental groups (pre and post test scores) revealed significant difference at one per cent level, the performance of experimental group was higher against the control group on the arithmetic diagnostic test. (6) Perusal of the remedial package by the teachers reflected that it was suit-

able for use in classroom intervention and the manipulative resource materials supplemented could provide imaginative expenses in teaching and learning mathematics, [0959]

JURNANI, L. 1992. A study of life values, personality and creativity of physically handicapped senior higher secondary students of Rajasthan. Ph.D., Edu. *M.L. Sukhadia Univ.* Guide: Dr Shobha Golwalkar.

Problem: It is an attempt to study the values, personality and creativity of physically handicapped students.

Objectives: (i) To study the relationship between life values, personality and creativity of physically handicapped students of senior higher secondary classes in Rajasthan with physically handicapped settled persons, and (ii) to compare life values, personality and creativity of physically handicapped students studying in senior higher secondary with physically handicapped settled persons.

Methodology: Sample comprised 500 orthopaedically handicapped persons of which 250 were students studying in senior higher secondary government schools of Rajasthan and 250 were settled with minimum graduation degree ranging from 25 to 40 years. Tools used were 16 Personality Factors Questionnaire-Form A by R.B. Cattell, Creativity Test by Baqer Mehdi and Life Value Scale constructed by the investigator. Collected data were treated with mean, SD, coefficient of correlation and 't'-test.

Major Findings: (1) For life values the comparison of both the groups showed that the groups were different except in hedonistic value. Physically handicapped students were to be found higher in religious, social-economic, democratic and total life values. (2) On personality traits physically handicapped settled persons were outgoing, more intelligent, emotionally more stable, assertive, happy-go-lucky, conscientious, venturesome, suspicious, shrewd, apprehensive, experimenting, self-sufficient, controlled and tense while physically handicapped students were tender-minded and imaginative. (3) On creativity factor physically handicapped students were found to be more creative than settled persons. [1015]

JOSHI, RAJNI. 1997. A study of effectiveness of individualised language programme for expressive language disorders in case of children who are developmentally delayed in language. Ph.D., Edu. *Jamia Millia Islamia.* Guide: Dr (Mrs.) Kusum Sharma.

Problem: This study examines the effectiveness of individualised language programme for expressive language disorders in case of children who are developmentally delayed in language which serves to ensure the alternative mode of instruction (individualised instruction) to children who really need it.

Objectives: (i) To identify the children who can not acquire language in a normal course of time, (ii) to classify the expressive language disorders committed by the developmentally delayed (language) children, (iii) to study the effectiveness of individualised language programme (ILP), and (iv) to suggest an individualised language programme (ILP) to accelerate the language development processes on the basis of the observed effectiveness of the programme.

Methodology: The sample comprised 80 students studying in Grade I who were selected through purposive sampling technique from MCD schools. Tools used in the study included Teachers' Observation Check-List developed by investigator, school record, Raven's Coloured Progressive Matrices and Achievement test in Hindi developed by the investigator. The collected data were treated with mean, SD, 't' test and coefficient of correlation.

Major Findings: (1) Group A1, which was exposed to individualised language programme (ILP) obtained higher mean than the group A2, which was taught through conventional method of teaching (CMT). (2) The effect of intervention strategy (ILP) on all the four sub components namely, knowledge, understanding, comprehension and expression revealed that Group A1 achieved higher scores as compared to A2. [0946]

JULKA ANITA. 1998. Teacher empowerment and successful mainstreaming of visually impaired children. *Disabilities and Impairments*, Vol. 12(1), 40-50.

Problem: It attempts to discuss various issues

and concerns by which successful mainstreaming of visually impaired children can be achieved.

Objective: To examine the various issues and the role of regular and special teacher related to the education of the visually impaired children in mainstream schools.

Methodology: The sample included fifteen people who were actively involved in the field of education of children with special needs covering school administrators, special educators, regular teachers, parents and persons from voluntary organizations. They were extensively interviewed.

Major Findings: (1) For successful mainstreaming of visually impaired, the special teachers have to work with many others in partnerships. The training of special teachers needs to be revised accordingly. (2) Human resources are being wasted if full range of services are not provided in quantity and quality as required by each individual child. (3) The special needs of the children before they enter regular schools have to be met by parents, anganwadi workers and others under the guidance of special teachers. (4) Successful mainstreaming of visually impaired is only possible with two levels of education—academic and compensatory. Those have to be met by both the classroom and special teacher. (5) If inclusive education is to be the focus of educational policy in near future, the reciprocal role of regular and special teacher becomes crucial. (6) Parents need to be counselled before the children have to be integrated in mainstream schools. (7) Children should not be segregated from their community and left at the mercy of rehabilitation services unless and until it is necessary. (8) Appropriate incentives to be given to regular teachers. They are responsible for actually modifying the learning environment for the visually impaired child. [1110]

JYOTHI, M.N. AND REDDY, Y.S. 1998. **Professional satisfaction of teachers working in the schools for the hearing impaired.** *Experiments in Education*, Vol. XXVII(8), 142-146.

Problem: It attempts to study the professional satisfaction of teachers working in the schools for the hearing impaired.

Objectives: (i) To find out whether teachers working in the schools for the hearing impaired were satisfied with their profession, (ii) to identify the different factors that contribute to greater professional satisfaction among teachers, and (iii) to find out the factors that contribute to dissatisfaction among teachers.

Methodology: The sample for the study comprised 96 teachers working in 19 schools for the hearing impaired spread over Andhra Pradesh. To measure the professional satisfaction of teachers, a 3 point scale prepared for this purpose was used. Mean, SD and 't'-test were used to treat the data.

Major Findings: (1) The teachers in general had significant over all professional satisfaction. However, they were not satisfied with the factor related to academic aspects. (2) Teachers were not satisfied with only one crucial factor, i.e., academic aspects. (3) Teachers were immensely satisfied with their profession on the aspects related to 'student' and on the aspects pertaining to 'interpersonal relationship'. [0964]

KREJCI, MILADA. 1998. **A study of the use of Yoga with mentally-retarded children.** *Disabilities and Impairments*, Vol. XII(2), 75-80.

Problem: Present study is an attempt to assess the use of yoga with mentally-retarded children.

Objectives: (i) To prepare and verify a programme of yoga exercises designed for mentally-retarded children of school age, and (ii) to study whether it is possible to positively influence co-ordination, dexterity and mobility by practicing yoga exercises.

Methodology: The sample consisted of 17 pupils from a special school (9 males and 8 females) between the ages of 9 and 11. Tests of flexibility, the 'full forward bend' and 'Shoulder torsion' (Mikota) and the test of motoric docility 'set of exercises with pole' (Mikota) were used before and after the programme of yoga exercises. Standard sociometric techniques were used at the beginning of the programme.

Major Findings: (1) Out of 16 children who took part in the 'Full forward bend' test, there was a significant improvement in 11 of them, three of them had worsened and 2 made no progress.

(2) Out of 16 children who took part in the 'shoulder torsion' test, only 7 improved, 8 had made no progress and 1 worsened. (3) The speed of motoric docility improved in a marked number of children. [1050]

LALI, S. 1997. A comparative study of the scholastic achievement of visually handicapped pupils and the normal pupils studying under the integrated system in secondary schools of Kerala. *Experiments in Education*, Vol. XXV(9), 176-180.

Problem: The study attempts to compare the scholastic achievement of visually handicapped pupils and the normal pupils studying under the integrated system.

Objectives: (i) To compare the visually handicapped and normal pupils on the basis of their scholastic achievement in each of the eight subject areas of school curriculum as well as in their total performance, and (ii) to compare the visually handicapped and normal pupils on the basis of their scholastic achievement in each of the three levels of cognition, viz., acquisition of information, understanding, and ability to apply the understanding in new situations with respect to various subjects.

Methodology: Data were collected from 41 visually handicapped pupils from eight schools having integrated system of education. For comparison, similar groups of normal pupils studying under the integrated system were identified after equating for intelligence, SES, sex and place of residence. The tools used were standardised achievement tests developed by the investigator for all the curricular subjects in Standard VIII, Kerala University Verbal Group Test of Intelligence, and Kerala Socio-Economic Status Scale. The collected data were treated with mean, SD, 't'-test and correlation.

Major Findings: (1) The visually handicapped pupils were found to be significantly different in scholastic achievement in all subjects except Malayalam. (2) In levels of cognition, the visually handicapped pupils seemed to be disadvantaged more at the application level than at knowledge and understanding levels in all subjects. [1145]

PARANJPE, SANDHYA. 1993. Quality of working life: A focus on teachers in special education. *Indian Educational Review*, Vol. XXVIII(2,3,4), 111-114.

Problem: Present research is an attempt to study Quality Working Life(QWL) in the educational setting specifically of special education teachers.

Objectives: (i) To assess the QWL perception of special education teachers, (ii) to determine the relationship between QWL perception, job satisfaction, job involvement and work involvement, (iii) to determine the relationship between need fulfilment, relative need importance and QWL, (iv) to find out if difference existed in the QWL perception of teachers from government and voluntary educational institutions for the handicapped, and (v) to identify the predictors of QWL perception from the variables in the study.

Methodology: The total sample consisted of 240 teachers serving in 21 institutions for handicapped learners. These institutions were of three types —special schools for the visually, hearing and mentally handicapped children. The tools used were Personal Information Blank, Sashkin and Lengermann's Quality of Work Life Conditions/Feelings (QWLC-F) Questionnaire, Proter's Need Fulfilment Questionnaire, Questionnaires on Job Satisfaction; Job Involvement; Work Involvement by Kanungo, Gorn and Dauderis and Gordon's School Environment Preference Schedule. Collected data were analysed using coefficient of correlation, multiple regression analysis, discriminant analysis and Varimax rotated factor analysis.

Major Findings: (1) Significant correlates of QWL that emerged were physical status of the respondent, sex, years of experience, nature and size of the organisation, job involvement, job satisfaction, need-fulfilment and self-esteem need. (2) Significant predictors of QWL feelings were nature of the organisation and job satisfaction, whereas for QWL conditions they were the physical status of the respondent and the size of the organisation. (3) Special education teachers working in three types of institutions for the mentally, visually and hearing handicapped differed significantly in their perception of QWL

conditions, importance given to self-actualization, autonomy and self-esteem needs, job involvement and school environment preference. (4) Special education teachers working in government and voluntary educational institutions for the handicapped varied significantly on QWL feelings, importance given to self-actualization, autonomy, personal growth, security, need fulfilment and job satisfaction. (5) On doing a micro-analysis of the sixteen job satisfaction factors, ten were found to be significantly related to QWL feelings and five to QWL conditions. (6) Factors that emerged as significant predictors of QWL-F were chance of future promotion, amount of recognition and respect and amount of compensation received for the work done. Predictors of QWL-C were interesting or enjoyable nature of the job, institute's policies, amount of recognition and respect and amount of compensation received for the job done. (7) Factor analysis yielded no general factor that accounted for the major portion of the common variance. [1079]

PARANJPE, SANDHYA. 1994. **Importance of need fulfilment in improving quality of working life perception : A focus on special education teachers.** *Indian Educational Review*, Vol. XXIX(3,4), 67-81.

Problem: The present study attempts to find out the importance of various needs and their fulfilment as related to quality of working life (QWL) perception, amongst special education teachers.

Objectives: (i) To assess the QWL perception of special education teachers, (ii) to assess the level of need fulfilment and importance of various needs amongst special education teachers, (iii) to find out whether a relationship exists between need fulfilment importance given to various needs and QWL perception of special education teachers, (iv) to find out if difference exists in the QWL perception, need fulfilment and importance of various needs amongst special education teachers belonging to government and voluntary organisations for the handicapped, and (v) to find out if differences exist in the QWL perception, need fulfilment and importance of various needs amongst teachers working in institutions for the visually, mentally and hearing handicapped.

Methodology: The sample comprised 240 special education teachers from 21 institutions for the visually, mentally and hearing handicapped in Delhi. Two standardised tools—Sashkin and Lengermann's QWLF-C Schedule and Porters Need Fulfilment Questionnaire were administered individually. Product moment correlation and discriminant analysis were used to analyze the data.

Major Findings: (1) Need fulfilment was positively related to both QWL perception for feelings and conditions. (2) Special education teachers placed more importance on the higher order needs of autonomy, self-esteem and self-actualization. (3) Teachers from government and voluntary organisations differed significantly in their perception of QWL-F security need fulfilment, personal growth and the importance given to autonomy and self-actualisation needs. (4) Differences were found amongst teachers working in different institutions for the handicapped, as related to QWL conditions, self-actualisation fulfilment and importance given to the higher order needs. [1046]

SAXENA, RADHA RANI. 1992. **A study of intellectual and non-intellectual characteristics of slow learners.** Ph.D., Edu. Banasthali Vidyapith. Guide: Prof. K. Kumar.

Problem: The study is centered around the characteristics, problems and expectations of slow-learners.

Objectives: (i) To study the level of the intellectual factors (verbal, numerical and reasoning ability, and mechanical reasoning, space relations, clerical speed and accuracy) of slow learners, (ii) to study the level of non-intellectual factors (learning speed, achievement motivation, maturity, temperament, vocational interests and values) of slow learners, (iii) to study the persistent problems and expectations of slow learners, and (iv) to provide a guideline for the development of a sound guidance programme for proper handling of slow-learners.

Methodology: The sample consisted of 400 slow learners, i.e., 100 boys and 100 girls within the I.Q. range of 70-89 and a similar number of boys and girls within the I.Q. range of 80-89. The tools used were Cattell's Culture Fair Intelligence Test-Scale-3, Form A (Non-verbal).

Jalota's General Mental Ability Test (verbal), D.A.T. (Indian adaptation by J.M.Ojha), Learning Digit Substitution Test (self made), Rao's Achievement Motivation Test, Kumar's Maturity Scale, Krishna Kumari's Temperamental Schedule, Thurston Interest Schedule, Self made Value Check-List, Expectation Check-List and Problem Check-List. Collected data were analysed by ANOVA and 't'-test.

Major Findings: (1) The performance of all the slow learners was significantly low on all the intellectual factors, temperamental traits and values. (2) Boys performed significantly better in mechanical ability and space relations, emotional and social maturity, on almost all the temperamental traits except tough mindedness and cheerfulness, and on some vocational interests like physical sciences, executive linguistic, humanitarian, artistic and musical and on social and theoretical values. (3) No significant difference was seen regarding learning speed, achievement motivation, intellectual maturity, some vocational traits related to biological sciences, computation, business and linguistics, some temperamental traits, i.e., toughmindedness and cheerfulness and some values, i.e., religious, political, aesthetic and economic. (4) Slow learners of Category-I performed significantly better on all the intellectual factors except on space-relation ability and clerical speed & accuracy. In Category-I girls performed better on verbal ability whereas in Category-II they performed better in Numerical and Reasoning ability. In others, boys performed better than girls. (5) Slow learners of Category-I showed a significantly better learning speed; boys were better than girls in both the categories. (6) Slow learners of Category-I also showed a significantly better achievement motivation, girls of Category-I and boys of Category-II showed better motivation. (7) Slow learners of Category-I performed significantly better on 'Maturity' in Category-I boys performed better on all the types whereas in Category-II girls performed better on intellectual and emotional maturity. (8) Significant difference among groups was found on all the temperamental traits except on tough mindedness. Boys in both the categories were found to be more impulsive, in Category-I boys were more accepting on all the other traits, in both the categories, girls performed better than boys. (9) Slow learners of Category-I performed significantly better on

some vocational interests, i.e., Physical Sciences, Executive, Linguistic, Humanities, Artistic and Musical. Girls in both the categories showed a better performance except in 'Physical Sciences' where boys of both the categories performed better and in 'Musical' where boys of Category-II performed better. (10) Slow learners of Category-I possessed significantly better religious and aesthetic values whereas slow learners of Category-II possessed better political and social values. In category-I, boys performed better than girls on Aesthetic values whereas in Category-II they performed better on political and social values. (11) Mostly slow learners faced so many problems regarding parents, siblings, family members, and school teachers. (12) Majority of slow learners had much more expectations from parents, siblings, teachers, and school authorities. [1108]

SHARMA, PREM LATA. 1997. **Education of children with hearing impairment.** *The Primary Teacher*, Vol. XXII(1), 26-29.

Problem: This study was undertaken to find out the effectiveness of a modified instructional material in science for teaching difficult concepts to hearing impaired children.

Objectives: (i) To identify areas and concepts from the science textbooks requiring adaptation to meet the educational needs of hearing impaired studying in ordinary schools, (ii) to develop exemplary materials to facilitate the teacher to develop and plan instructional material for teaching science more appropriately, and (iii) to develop a handbook on the adaptation in science instructional materials for the primary school teacher for trying it out in ordinary schools.

Methodology: The sample consisted of 100 hearing and 100 hearing impaired students from Classes II-V studying in integrated and special schools constituted sample for this study. Raven's Progressive Matrices and Science Achievement Test (self-constructed) were used to collect the data. Mean values and significance of differences were found out while treating the data.

Major Findings: (1) The adaptation in instructional material alone had raised their performance in science. (2) The performance of hear-

ing impaired students of Classes III, IV and V from integrated schools was better on both pre-and post-test than from the students of special schools. (3) The early language development and preparation for education facilitated the hearing impaired in coping with the difficulties of regular classroom participation. (4) The use of adapted instructional material and methodology also helped the slow learning hearing children in IED settings. [1068]

SHARMA, SUNITA. 1998. **A study of visually disabled and sighted students in relation to their frustration and study involvement.** *Disability and Impairments*, Vol. XII(2), 101-106.

Problem: The present study attempts to find out the difference between visually disabled and sighted secondary school students on frustration and study involvement.

Objectives: (i) To study the difference between visually disabled and sighted children on frustration, and (ii) to study whether these groups differ significantly from each other on study involvement.

Methodology: The sample comprised 70 students (35 visually disabled and 35 sighted) of both the sexes studying in secondary schools for the blinds and sighted respectively at Dehradun. Tools used were Frustration Test by N.S. Chauhan and G. Tiwari and Study Involvement Inventory by Asha Bhatnagar. Collected data were treated with means, standard deviation and 't' ratios.

Major Findings: (1) Visually disabled were more frustrated when compared with their sighted counterparts. (2) The visually disabled had been found less involved so far as their study involvement was concerned. [1053]

VASANTH, R. 1996. **Mathematical learning disabilities in relation to certain psychological, social and educational factors among Class VII pupils.** *Indian Educational Review*, Vol. XXXI(2), 142-145.

Problem: Present study is an attempt to examine mathematical-learning disabilities in relation to certain psychological, social and educational factors among Class VII pupils.

Objectives: (i) To identify the various types of mathematical-learning disabilities among Class VII pupils, (ii) to establish the relationship between mathematical-learning disabilities and psychological factors such as intelligence, extraversion, neuroticism and behaviour problems, (iii) to study the relation between mathematical-learning disabilities and educational factors such as linguistic pattern and different types of school following different curricula, and (iv) to ascertain the extent of difference in mathematical learning disabilities among the three combinations of gender and socio-economic groups.

Methodology: The sample comprised 1,172 children of Standard VII belonging to the age-group of 11 and 13 years from government, matriculation and central schools who were monolingual, bilingual and trilinguals. The tools used were Chatterji's Non-Language Test of Verbal Intelligence Form (768), Junior Eysenck Personality Inventory, Vasumathi's Behaviour Problems Rating Scale, Socio-Economic Status Scale by Kuppaswamy and Mathematical Learning Disabilities Test. Step-wise regression analysis and multivariate analysis of variance were used to analyse the data.

Major Findings: (1) Mathematical-learning disabilities had been classified into ten interrelated groups. (2) Mathematical learning disabilities had negative relation with intelligence and socio-economic status among Standard VII pupils belonging to monolingual, bilingual and trilingual groups from government, matriculation and central schools. (3) The central school pupils manifested minimum-mathematical learning disabilities compared to the government and matriculation school pupils. (4) Pupils from low socio-economic status exhibited maximum mathematical-learning disabilities compared to the pupils from high and middle socio-economic groups. [1072]

YADAVA, AMRITA.; JAKHAR, NIDHI AND SHARMA, NOV RATTAN. 1999. **Effect of glucose on memory in mentally retarded subjects.** *Journal of Personality and Clinical Studies*, Vol. 15(1-2), 25-30.

Problem: The present study is an attempt to find out the effect of glucose on memory in mentally retarded subjects.

Objective: To investigate if exogenous supplementation of glucose would have a facilitative effect on memory.

Methodology: A sample of 10 mentally retarded subjects was taken from Arpan, a school for mentally retarded children, run by the Red Cross Society in Rohtak, Haryana. All subjects had been residents of the school for atleast 3 years. A single measure of short-term memory, visual retention, was selected for the present investigation. A two group, repeated measure, counter balanced design was used. Beverages were counterbalanced in each group (5 subjects: Glucose-saccharine, 5 subjects: saccharine-glucose). Blood glucose levels were measured immediately before and 15 minutes after intake of beverage, followed by the visual retention test. The blood glucose (basal and after 15 minutes of intake) and visual retention scores of mentally retarded and age matched control subjects were statistically analysed by using Two-way ANOVA with repeated measure on one factor.

Major Findings: (1) The blood glucose levels of the mentally retarded subjects were significantly lower as compared to the normal subjects. (2) The visual retention score of the mentally retarded subjects on the two days showed improvement after ingestion of 50 grams of glucose. (3) The ingestion of glucose prior to performance of a short term memory task did lead to improvement in performance in both normal as well as mentally retarded subjects. [1114]

DISTANCE EDUCATION

PATIL, S.S. 1997. **Management of different forms for distance education at higher education stage in Karnataka and its futures towards 2005 A.D.** Ph.D., Edu. Devi Ahilya Vishwavidyalaya. Guide: Prof. P.K. Sahoo.

Problem: The study is centred upon the different forms of distance education (DE) in Karnataka at higher education stage and identifies the trend in the context of growth of higher education in Karnataka. It also studies the normative futures of D.E. at higher education stage in Karnataka towards 2005 A.D.

Objectives: (i) To study the growth of different

forms of distance education in Karnataka at higher education stage from its inception and identifying its trend in the context of growth of higher education in Karnataka, (ii) to compare different aspects of management of D.E. through correspondence courses offered by the University of Mysore with that of IGNOU in the context of Karnataka State, (iii) to study the existing openness in ICCCEM and IGNOU as perceived by the teachers, (iv) to compare the level of openness in ICCCEM and IGNOU with reference to Karnataka, (v) to study the preferred futures of openness of ICCCEM and IGNOU as perceived by the teachers of D.E. towards 2005, and (vi) to conduct Delhi Study on normative futures of D.E. at higher education stage in Karnataka towards 2005 A.D. as perceived by the experts.

Methodology: The sample of the study comprised 37 teachers of IGNOU representing all the faculties, 45 counsellors of IGNOU representing all the faculties from two study centres of IGNOU in Karnataka, 173 D.E. learners of U.G. level of ICCCEM representing all the courses, 128 D.E. learners of U.G., level of IGNOU representing all the courses, 189 D.E. learners of PG level of ICCCEM representing all the courses, 35 D.E. learners of PG Diploma level of IGNOU representing all the courses, 80 D.E. learners of teacher education (B.Ed. and M.Ed.) courses of ICCCEM, 149 D.E. learners of Management courses of IGNOU, and 35 Experts from the higher education. The tools used were information schedules, students' perception of instructional system of D.E. questionnaires, teachers' perception of instructional system of D.E. questionnaires, and Institution Closeness Openness Scale developed by Patri and Sahoo.

Major Findings: (1) The students' support services of ICCCEM was found mainly to be print based with short term contact programmes. The IGNOU had print based materials audio-video materials, media like T.V. radio and teleconferencing along with occasional counselling sessions. (2) The evaluation system of ICCCEM included term and examinations where in IGNOU had continuous evaluation system. (3) The students of ICCCEM favoured merit as the criterion to admission where in IGNOU students favoured no prior academic qualification, experience and merit to be the basis of admission. Teachers of IGNOU stressed on experiences of

students. (4) The lesson script/course materials dispatch of ICCCEM and IGNOU were found satisfactory. The students of IGNOU made use of audio-video materials along with print media for their studies. (5) ICCCEM students did not find enough time for referring books in the library where as in the case of IGNOU study centres the students did not find adequate collection of books. The teachers of ICCCEM used lecture method for contact programmes whereas in the IGNOU teachers supplemented discussions with lecture. (6) The teachers of ICCCEM highlighted the role of P.C.P. (Personal Contact Program) in helping the students for better performance in the examination. The IGNOU teachers emphasized self-evaluation. (7) The average expenditure borne by the students of IGNOU towards completion of course was found comparatively less than that of ICCCEM. The ICCCEM students expenditure towards traveling lodging and boarding was more due to non-availability of study centres in their nearby places. (8) The teachers of ICCCEM found that their D.E. institutions' present status was less open in many of the aspects, they expected it to be moderately open towards 2005. The teachers of IGNOU perceived the status of their institution to be open to some extent. They preferred it to be highly open towards 2005. (9) The experts' views on the normative futures of D.E. in Karnataka revealed that the D.E. system in future should cope up with the future increase in the enrolment of students. It should incorporate net working with other D.E. institutions and even conventional mode in the areas of instruction, practicals and utilisation of infrastructure facilities. [0949]

ADULT, CONTINUING AND NON-FORMAL EDUCATION

CHAKRABARTI, SHARMISTHA. 1994. **Socio-economic background, literacy development and retention among female ex-learners: A study.** *Indian Educational Review*, Vol. XXIX(3,4), 130-138.

Problem: The present research is an attempt to study the socio-economic background, literacy development and retention among female ex-learners.

Objectives: (i) To study the income, occupation and educational status of the female ex-learners and to judge how it affected the retention of literacy among ex-learners, and (ii) to study the extent to which the female ex-learners retained their literacy skill acquired at the Adult Education Centre.

Methodology: The sample for the study consisted of 166 female ex-learners selected randomly from 12 Adult Education Centres of the seven villages for the study. Tools and techniques used in the study include Socio-Economic Background Scale and Literacy Achievement Test both developed by both investigator. Further, home visits, individual interview and discussion with the female ex-learners were undertaken to judge the family background, literacy achievement and its retention and to have first hand experience of detailed information. The collected data were treated quantitatively and qualitatively.

Major Findings: (1) The overall performance in total literacy achievement was very poor. Only 7.8% ex-learners could retain their literacy skills. 92.16% ex-learners scored below 70% marks of which 79.85% scored below 50% in numeracy. (2) The main occupation of ex-learners and their family members was agricultural labour. The achievement of literacy of ex-learners was not dependent on the occupation and income level of the family. (3) The performance of ex-learners in total literacy achievement whose family members were attending school was better than the ex-learners whose family members were not attending school. (4) The major reasons of poor performance were lack of practice of literacy skill after completion of training programme in Adult Education Centre, irregular attendance in literacy classes, fatigue after day's work, apart from family and occupational pressure. (5) Very few ex-learners were very eager to continue further education. (6) The reading and writing materials were not available to ex-learners after completion of the training in Adult Education Centre. [1024]

GUPTA, J.L.; TRIPATHI, S.N. AND YADAV, J.P. 1994. **Impact of literacy on socio-economic conditions of rural poor.** *Indian Journal of Adult Education*, Vol. XX(1), 67-73.

Problem: Present research is an attempt to study the impact of literacy on socio-economic conditions of rural poor.

Objectives: (i) To assess the level of literacy achieved and its impact on socio-economic conditions, and (ii) to study the problems and constraints affecting to follow up the National Literacy Mission Programme.

Methodology: The sample of the study comprised 50 participants, 50 non-participants and 20 executives and instructors who were engaged in NLM programme from 5 villages of Jaunpur District of U.P. Data were collected with the help of an interview. frequency, percentages and chi-square values were computed to analyse the data.

Major Findings: (1) After participation in NLM, majority of the participants became capable of recognizing and writing Hindi letters and numeracy along with English numeracy. (2) The literacy had a positive effect on the social participation, occupational behaviour, material possession social contact and also had increased the level of income of literate group. (3) A significant relationship was found between social participation, income group and literacy. (4) There was no significant association of occupational behaviour and social contact behaviour with literacy of the respondents. (5) Mostly respondent were facing problem due to the programme not being based on learner's need, poor quality of learning material, untimely supply of teaching materials, lack of mobile literacy and non-involvement of people in the programme. [1095]

GUPTA, J.P. 1998. **People's empowerment and adult literacy programmes.** *Adult Education and Development*, Vol. XI(1&2), 16-22.

Problem: It attempts to study the impact of adult literacy programmes on people's empowerment.

Objective: To study the impact of adult education programme particularly the total literacy campaigns launched, in addition to reading, writing, numerical skills, education imparted for empowerment in bringing about socio-economic awareness in people's life in 3 districts of M.P., West Bengal and Bihar.

Methodology: Sample of the study comprised

1,669 adults who were selected through systematic random sampling procedure from three districts namely Bilaspur, Birkhum and Dumka. Data were collected with the help of structured interviews, group discussions and unstructured interviews.

Major Findings: (1) The parents of children irrespective of their literacy status had a positive attitude towards education of both boys and girls. (2) The enrolment of boys and girls in the age group (6-15 years) was significantly higher in neoliterate households compared to the children in the nonliterate household. (3) School drop-out rate of children was marginally higher in the case of nonliterate households. (4) Overwhelming differences was found between neoliterates and non-literates in knowledge levels and attitudinal disposition towards minimum age of marriage for boys and girls, problems of early marriage, spacing and small family norm. (5) Better awareness of health practices prompted more neoliterates to collect safe drinking water from community hand pumps. (6) Use of family planning methods was higher in the case of neoliterates compared to nonliterate. (7) A high number of neoliterates reported that they had given up alcohol consumption since completion of TLC. (8) Acquisition of literacy skills appeared to had a wide ranging effect on the personality development of neoliterates. (9) A majority of neoliterate women had reported that their status in the family had improved after acquisition of literacy skills. (10) 14% of neo-literate women interviewed had received loans from different sources and had set up individual enterprises. [1062]

JOSHI, UMA.; MEHTA, NEEPA AND ZAVERI, HINAXI. 1997. **Games as reinforcers of literacy skills.** *Journal of Research in Educational Media*, Vol. 4(1), 29-42.

Problem: This study attempts to investigate the use of games as interactive methods of reinforcing literacy skills.

Objectives: (i) To develop and use games for reinforcing the selected concepts of literacy and numeracy included in literacy and post-literacy primers (text) among adult women under Post-Literacy Campaign, and (ii) to find out the effectiveness of games in reinforcing the

concepts of literacy and numeracy.

Methodology: The sample consisted of 50 neo-literates who attended the first phase of the total literacy campaign launched in the Baroda City of Gujarat State in August 1994. The different ideas like words, phrases and mathematical concepts for educational games were collected by identifying available games and review of available materials on literacy and post-literacy. A total of ten games were finalised to be included on selected concepts of literacy and post-literacy which helped in reinforcing reading, writing and numeracy skills. Film strips, slides and video shows were used for arousing interest among women participants. After fifteen days, the effectiveness of games was tested using a reaction scale and a test paper. The games and test paper were validated by experts.

Major Findings: (1) Games were effective in reinforcing the skills in reading, writing and numeracy. The reactions of the learners, the enthusiasm of the community worker and the members of social service organizations supporting the programme towards the use of games was favourable. (2) A major complaint during and at the end of the Literacy Campaign had been the high dropout rate of learners. (3) The community worker had shown interest in learning the use of games for promoting various concepts under the Total Literacy Campaign. The regular interaction with her had helped to know that high dropout rate of volunteers was mainly due to lack of interesting resources for teaching. (4) At the project implementation stage, the project worker had experienced that the girls and women had the problem of lack of practice in developing and continuing to develop writing skills. (5) During the stages of identification of beneficiaries and implementation of project the project worker had benefitted from the control that the campaign volunteers or workers had over the girls and women in the community. [1132]

KAUR, PUSHPINDER AND KAUR, AMRIT. 1998. **Factors which motivate rural female adults to participate in the adult education programme in relation to the size of their family.** *Indian Journal of Psychometry and Education*, Vol. 29(1), 77-80.

Problem: This study examines factors which motivate rural female adult to participate in the Adult Education Programme in relation to the size of their family.

Objective: To examine illiterate rural female adults in relation to the size of their families.

Methodology: The sample comprised 500 rural female adults of age range from 16 to 45 years who were participating in the adult education programme conducted by the Chandigarh Literacy Council. The tool used to collect the data was a Questionnaire for Rural Female Adults prepared by the investigators. The collected data were treated using percentage.

Major Findings: (1) Rural female adults belonging to small families were more keen than their counterparts belonging to large families about learning the importance of giving education to their children and to learn embroidery and sewing. On the other hand, a rural female adult coming from a large family was more keen to learn about good health, balanced diet, keeping house clean and to discharge family responsibilities. (2) Economic factors namely acquiring knowledge about household accounts and money saving devices, learning to shop, learning ways of enhancing income and job efficiency, and learning to make proper use of money motivated small family adults more than large family adults to participate in adult education. (3) Rural female adults belonging to small families were more anxious than their counterparts belonging to large families about acquiring communication skills, living in harmony with the members of the family, solving domestic problems and avoiding social evils. (4) Rural female adults belonging to large families were more interested in knowing about political conditions prevailing in the state and the country. (5) Three educational factors, viz., learning to write, read, and count motivated large family adults more than small family adults to participate in adult education programme. [1123]

KHANDAI, HEMANTA. 1996. **Impact of total literacy campaign on enrolment.** *The Primary Teacher*, Vol. 21(4), 33-36.

Problem: The study attempts to see the impact of Total Literacy Campaign (TLC) in awakening an urge among the masses for provision of

facilities at primary school.

Objectives: (i) To assess the enrolment of school-going children below the age of 15 at primary level before and after TLC campaign, (ii) to study the impact of TLC in awakening urge for provision of facilities, and (iii) to identify the activities undertaken by TLC for changing the attitude of parents towards education.

Methodology: Data were collected from the parents whose children were going to primary school especially in the age group of (6-15), head of the primary school and leader of the panchayat. Secondary data were collected from the school office, block headquarters and district headquarters.

Major Findings: (1) A majority of headmasters responded that the parents were very much conscious regarding their children's education after TLC. Further, headmasters accepted that *Zilla Saksharta Samiti* workers worked hard and they put in special efforts towards high enrolment in primary school. Headmasters also opined that TLC helped in health and sanitation awareness among adult learners. Moreover, a majority of headmasters suggested that sufficient staff, rooms and teaching-learning equipments needs be provided in schools in order to achieve high enrolment. (2) A majority of parents were highly influenced by the activities like, *Kalajatha*, *nukkad natak* and rally undertaken by *Zilla Saksharata Samiti*. Further, a majority of parents responded to educational messages and were very much concerned about their children's education, health of the family and economical improvement in family. Parents also suggested that financial assistance, free books, dress, mid-day meals and recreational facilities would favour high enrolment in schools. (3) The secondary data analysis indicated an increase in the enrolment, and a decrease in dropout rate. [0996]

KUMAR, REKHA.V. 1998. **Adult education programmes and rural women — A socio-logical study**. Ph.D., Socio. Karnataka Univ. Guide: Prof. Anil. G. Mudbidri.

Problem: The present study has tried to assess the impact of the programme on rural women in matters concerning small family norm, maternal child health and hygiene.

Objectives: (i) To study the impact of the adult education programme (AEP) on the acceptance of small family norm, (ii) to assess the impact of AEP on issues relating to maternal and child health, (iii) to understand the impact of the AEP on the health and the hygiene practices of the rural women, and (iv) to know the impact of the AEP on the status of the rural women.

Methodology: Sample comprised 300 females (150 learners and 150 non-learners) from three villages selected through random sampling method. Standardized Interview Schedules and Participant Observation Method were used to collect the relevant data. Statistical techniques used were Chi-square, 't'-test, Z-test, and ANOVA.

Major Findings: (1) There was no significant difference between the learners and non-learners with respect to method of family planning adopted and sources of information about the family planning techniques. (2) The impact of the AEP on the learners was more than the non-learners when the learners were totally illiterate or dropouts. (3) The impact of AEP was more with respect to the learners coming from different income groups. (4) The adult rural female literates had more knowledge of the benefits of small family norm than the non-learners. (5) Adult rural female literates had a better knowledge and practice of immunization. (6) There was no significant difference between the learners and non-learners with regard to knowledge of the benefits due to breast feeding and practice of breast feeding. (7) There was a significant difference between the learners and non-learners with respect to visiting clinic for prenatal check-up, preference of hospital/PHC as place of delivery, practice of delivery in hospital/PHC and delivery attended by specialized persons. (8) The impact of the programme on the learners was highly significant with respect to the importance and benefits of maternal care, (9) The adult rural female literates had better health and hygiene awareness than the non-learners. (10) There was a significant difference between the learners and non-learners with respect to social awareness, economic awareness, political awareness and decision-making. (11) There was a significant difference in the status of learners and non-learners with respect to village, age, religion, caste, type of family, occupation and annual income. (12) There was

a significant difference between the learners and non-learners with respect to decision-making. [1080]

OMORUYI, FRANCIS E.O. 1998. **Impact of the National Literacy Programme on the participants in Mid-Western Nigeria.** *Indian Journal of Adult Education*, Vol. VIX(2), 30-36.

Problem: The present study is an attempt to assess the impact of the National Literacy Programme on the participants in the Mid-Western part of Nigeria.

Objective: To determine the effects of the adult literacy programme on the lives of the participants.

Methodology: The sample of the study consisted of 250 respondents from mid western part of Nigeria which included participants of literacy programme, instructors and administrators. While the learners or participants were randomly selected, no sampling was done for the literacy instructors and administrators because, relatively, their number was small. Relevant data were collected using questionnaires. Collected data were analysed with the help of mean, SD and ANOVA.

Major Findings: (1) There was a general consensus among the views of participants, instructors and administrators on the impact of literacy programme on the participants. (2) The study revealed that the effect of literacy on the participants included increase in literacy skills, acquisition of communication skills, job efficiency, better understanding of one's society and greater involvement in societal activities like voting. (3) The respondents recorded that it enabled them to acquire the literacy skills which they used in their day-to-day lives where they engaged themselves in various activities without having to rely on someone else to help them. They could do their domestic activities better unlike when they were illiterates. (4) It has also been demonstrated that the programme had only concentrated on the social aspects and had not yet had done anything to enable the graduates or participants to engage in economic activities that would improve their standard of living and status [1021]

PILLAI, P.G. 1994. **Involvement of resource persons in the total literacy campaign in Kerala.** *Indian Journal of Adult Education*, Vol. VV(2), 55-60.

Problem: Present study is an attempt to find out the involvement of resource persons in the total literacy campaign in Kerala.

Objectives: (i) To find out the extent of involvement of resource persons in the Aksharakeralam project, (ii) to identify the details regarding the implementation of the Aksharakeralam project, (iii) to find out the basic obstacles in the implementation of the project, and (iv) to suggest measures for improving the total literacy campaign.

Methodology: Sample comprised 116 resource persons (RPs) (92 males and 24 females) selected on the basis of Stratified Random Sampling from Thiruvananthapuram District. Questionnaire was used to collect the data from resource persons. Unstructured Interview was conducted with instructors and project staff. Data were treated with percentages.

Major Findings: (1) Majority of the resource persons involved in the Aksharakeralam project were male and they were in the age-group of 20-30 years. (2) Majority of the RPs had educational qualification 'degree and above' and majority of them had no technical qualification. (3) Majority of RPs reported that they conducted literacy classes in their respective areas. (4) More than 50% RPs were satisfied with the physical facilities available in the literacy centres. (5) Majority of the resource persons adopted both oral and written methods for evaluation of learners. (6) Majority of the resource persons reporting dropping out stated that family problem and lack of interest were the main reasons. (7) The major measures adopted to motivate learner's were squad work, street processions discussion of learners problem, film show, newspaper reading, house to house campaign and community meetings. (8) Seventy six per cent resource persons contacted key resource persons, Master trainers and instructors for conducting literacy programmes and organised academic councils in their areas. (9) Majority of the resource persons received full support from instructors, Master trainers, Assistant project

officers and Project officers. (10) Social commitment and teaching illiterate as a noble task were the two major reasons for serving as resource persons. [1057]

RAINA, B.L. 1994. **Continuing Education Programme in M.S. University of Baroda, Gujarat: A study.** *Indian Educational Review*, Vol. XXIX(3,4), 117-129.

Problem: The present study is an attempt to look into continuing education programmes offered by the M.S. University of Baroda, Gujarat and understand the background of the candidates going in for the programme and their perceptions of continuing education.

Objectives: (i) To enlist long-term and short summer courses offered by the centre for continuing/adult education of M.S. University, Baroda since 1990-93, (ii) to identify the background of students joining these courses of batch 1992-93 session — age, sex and educational qualifications, (iii) to study the reasons for taking up such courses by students, (iv) to study whether the course content of the courses is meeting the needs of students, and (v) to study future needs of the students in terms of launching fresh courses.

Methodology: The sample consisted of students of the 1992-93 batch, admitted in different courses offered by the centre of Continuing Education of the M.S. University, Baroda. In addition randomly selected ex-students of the previous two batches (5%) candidates of each of the long-term courses and short summer course formed the sample for the study. The official records and a copy of course content of each course offered along with the teacher of each course provided the basic information and source of primary data. A questionnaire developed by the investigator was administered to the students and the responses collected in the shape of opinion on each item. Besides this, interview with students of the past and the present, faculties teaching different courses and the core staff of the centre were the main sources of information. Collected data were analysed qualitatively.

Major Findings: (1) About 70% of the students and about 60% of the faculty felt satisfied about the conduct of the short summer courses.

(2) Enrolment percentage of men was more than women in all the courses except Interior Decoration. (3) Most of the students joining these courses were young, i.e., between the age group of 18 and 26, mainly with graduate and post-graduate qualification. (4) The majority of the students were from middle class with monthly earning of about Rs 5,000. (5) The majority of the students had joined these courses for enhancing their job prospects in different areas. (6) Mostly students were satisfied with course content and they had expressed after completion of the course they had good chances of getting a better job. (7) The majority of the students expressed the need of such courses and satisfaction on the course content taught. (8) About 30% students in different courses were from higher age group, married and employed people. (9) Mostly the courses were run during summer holidays from April to July, 1993. About two thousand candidates were enrolled for different courses. [1023]

REDDY, P.A. 1993. **Adult education instructor : Determinants of his effectiveness.** *Journal of Indian Education*, Vol. XVIII(5), 40-45.

Problem: The present investigation is an attempt to identify the socio-demographic and psychological variables like sex, age, caste, educational level, marital status, income, mass media exposure, achievement motivation, attitude and personality traits related to instructor effectiveness.

Objectives: (i) To study the influence of age, caste, sex, level of education and marital status on the adult education instructors' effectiveness, (ii) to study the impact of occupation, size of land and income of instructors on their effectiveness, (iii) to examine the impact of mass media on the instructor's effectiveness, (iv) to assess the influence of urban pull on their effectiveness, (v) to examine how personality characteristics, achievement motivation and attitude are related to their effectiveness, and (vi) to estimate the amount of influence exerted by various independent variables chosen on the instructor's effectiveness.

Methodology: The sample comprised 240 adult education instructors selected from two age groups less than 20 years and more than 21 years and 40 supervisors from the Rayalseema

region of Andhra Pradesh. Tools used were Instructor Effectiveness Scale, Cattell's 16 Personality Factors Questionnaire, Santhamani's Sentence Completion Test and a proforma on the socio-demographic aspects. Collected data were treated with mean, SD and multiple regression analysis.

Major Findings: (1) Instructors with high and low viewing were rated as effective instructors than the medium viewers. (2) Women, young, unmarried, less educated, professional, having moderate land, less income, low cinemagoers, high television viewers, high radio listeners, low newspaper readers, having medium exposure to mass media, low urban pull were found to be more effective instructors. (3) Out of 32 variables only ten viz. factor-M, Achievement-motivation, urban pull, Television, factor Q4, factor Q3, cinema, attitude, radio and factor Q2 turned out to be significant predictors of instructor effectiveness. [1010]

SIARMA, NISHI AND SAYEED, V.V. 1994. **Differential traits of illiterate participants and non-participants in total literacy campaigns — A study of Mangolpuri.** *Indian Journal of Adult Education*, Vol. VV(3), 32-37.

Problem: Present study is an attempt to study the differential traits in Total Literacy Campaigns (TLC) of Mangolpuri.

Objective: To study the personal, socio-psychological and communication traits of participants and non-participants adult illiterates in literacy activities of TLC.

Methodology: Sample comprised 50 participants and 50 non-participants in TLC, randomly selected from Mangolpuri, a resettlement colony in north-west Delhi. Standardised scales were used to measure the 13 variables related to socio-personal, socio-psychological and communication traits of adult illiterates. Percentage, Frequency and Chi-Square Test were the methods employed for statistical analysis of the data.

Major Findings: (1) The participants of TLC differed significantly in terms of their attitude towards adult literacy, achievement-motivation and communication behaviour related to adult literacy as compared to non-participants. (2) Significantly more participants as compared to non-participants had favourable attitude

towards adult literacy, and had scored higher in achievement-motivation level and exhibited better traits of communication. (3) Amongst the participants majority belonged to the younger age group of 15-25 years. (4) Non-participants were mostly those who were in higher age group of 26-35 years. Majority of them were either housewives or employed persons. [1066]

VANKA, SITA. 1995. **Education for all — the problem of dropouts among women in the Hyderabad District.** *Indian Journal of Adult Education*, Vol. VVI(4), 21-26.

Problem: It attempts to study the problem of dropouts among women in Hyderabad District.

Objectives: (i) To examine the reasons for participants' withdrawal from the Adult Education Centres (AEC) in three implementing agencies of the Hyderabad District, and (ii) to understand their attitudes and perceptions towards the programme, their motivation to rejoin the AEC's, etc.

Methodology: The sample was drawn from three implementing agencies-41 from government centres, 40 from UGC sponsored Osmania University's "Centre for Adult, Continuing Education and Extension" (CACE&E) and 20 from voluntary agency to the cause of women-MARPU. Data were collected with the help of an informal interview with the respondents. Percentages were calculated to analyse the data.

Major Findings: (1) A majority of women indicated that they had joined the AEC with the objective of learning reading and writing skills. (2) Four major reasons emerged for respondents' dropping out from the programme viz. lack of time for educational activity due to the compulsions of labour outside home, social inhibitions and discouraging environment in the family, household work and non utility of learning. (3) Inconvenient timings was the only reason cited related to AEC. [1090]

EDUCATION OF THE SC, ST AND MINORITIES

ANANDA, G. 1995. **Wastage in primary education among tribal children.** *The Primary Teacher*, Vol. XX(1), 37-41.

Problem: A study on the rate of wastage and stagnation in the children of tribal population.

Objectives: (i) To know the functioning of primary education of Chenchu tribes, (ii) to find out the rate of absenteeism of Chenchu children attending primary school, (iii) to find out the rate of stagnation of Chenchu primary education system, and (iv) to find out the drop-out rate of Chenchu children attending primary school.

Methodology: The sample is selected from three districts namely Kurnool, Mahaboobnagar and Prakasham. The rate of absenteeism, stagnation and dropout information were collected from school attendance registers.

Major Findings: (1) The absenteeism rate decreased in Classes II to V, and it was highest in Class I. (2) The mean stagnation of Class I was more than all other classes. (3) The average dropout was higher in lower classes and lower in higher classes. [1001]

ANNARAJA, P. AND THIAGARAJAN, A. PONNAMBALA. 1993. **Academic achievement of Scheduled Tribe adolescents in Salem District of Tamil Nadu: A psycho-socio study.** *Journal of Indian Education*, Vol. XVIII(6), 50-55.

Problem: Present study is an attempt to know the effect of psycho-socio factors on the academic achievement of the Scheduled Tribe adolescents.

Objectives: (i) To study the level of psychological factors viz. personality, occupational aspiration and intelligence, (ii) to study the level of sociological factors viz. socio-economic status and social attitude, and (iii) to study the effect of psychological and sociological factors on the academic achievement.

Methodology: Sample comprised 105 ST and 60 non-ST students drawn from two high schools and two higher secondary schools in Salem District. The tools used for the collection of data were Multi-Dimensional Personality Inventory of Manju Rani Agarwal, Culture Fair Intelligence Test (scale 2, form A) of Cattell and Cattell, Occupational Aspiration Scale of Srivastava, Social Attitude Scale by the investigator and

Socio-Economic Status Scale by Aaron, Marihal and Maletsha.

Major Findings: (1) Regarding personality factors, ST adolescents were better in self-concept, temperament, independency and adjustment than non-STs. (2) STs showed higher occupational aspiration than non-STs. (3) Regarding intelligence, non-ST adolescents were better than STs. (4) Most of the non-ST adolescents belonged to the higher SES group while most of the ST adolescent girls belonged to the higher SES group than non-ST girls. (5) ST adolescents showed favourable attitude towards culture and religion but they were showing unfavourable attitude towards caste and country. (6) With regard to academic achievement, non-STs were better than STs. [1007]

CHATTOPADHYAY, MIHIR KUMAR. 1998. **A quasi-experimental study on the educational backwardness of SC secondary school students in some districts of West Bengal.** *Perspectives in Education*, Vol. XIV(2), 87-95.

Problem: Present study is an attempt to examine the levels of academic achievement and motivational intensity for learning and achievement of Scheduled Castes school students of West Bengal in comparison to those of Non-Scheduled Castes students.

Objectives: (i) To identify the probable causes of the alleged backwardness of the Scheduled Castes students of West Bengal, and (ii) to compare the SC students' academic achievement with that of other students.

Methodology: The sample comprised 400 SC students and 400 other students from Bengali-medium secondary schools of Grades VIII and X under the West Bengal Board of Secondary Education, situated in the districts of Hooghly, 24-Paraganas and Nadia, which contained good proportions of both SC and other students. Data were collected with the help of tests of Knowledge, Understanding, Application ability, Motivational intensity for learning and achievement. Collected data were analysed by calculating mean, SD, 't'-test and ANCOVA.

Major Findings: (1) The SC students' group of Grade VIII had significantly lower scores on all the four tests as compared to the other students'

group. (2) The SC students' group of Grade X had significantly lower scores on all the four tests as compared to the other students' group. (3) The SC students of each of the Grades VIII and X did not differ significantly from other students of the same grade on knowledge, understanding and application ability of basic algebra. (4) The SC students of Grade X were superior to the SC students of Grade VIII on the measure of motivational intensity for learning and achievement. (5) Other students of Grade X were superior to the other students of Grade VIII on understanding and application ability of basic algebra and motivational intensity for learning and achievement. (6) There was no significant difference between Scheduled Caste secondary school students of Grade VIII and Scheduled Caste secondary school students of Grade X on the measures of knowledge, understanding and application ability of basic algebra. (7) There was no significant difference between the other secondary school students of Grade VIII and other secondary school students of Grade X on the measure of knowledge of basic algebra. [1025]

DUBEY, S.N. AND MISHRA, A.K. 1999. **Psychosocial determinants of academic success of rural boys.** *Perspectives in Education*, Vol. XV(3), 157-164.

Problem: Present research is an attempt to study the determinants of academic success of the Scheduled Castes (SCs), Backward Caste (BC), Muslims (MS) and Upper Castes (UCs) rural high school boys.

Objective: To identify the psychosocial determinants of academic success of rural boys.

Methodology: Sample comprised 100 students of Standards VIII to X belonging to the Scheduled Castes, Backward Castes, Muslims and Upper Castes selected from rural areas of Eastern U.P. Tools used were School Environment Inventory (SEI) and Self-Concept Questionnaire (SCQ). Collected data were treated with Multiple Regression Analysis.

Major Findings: (1) There was no consistency in the predictors of academic success across the four groups. (2) In SC and BC boy's samples, none of the SEI and SCQ variables contributed significantly to academic success. (3) In the MS

sample only one and in the UC sample two variables emerged as significant predictors of academic achievement. (4) School environment and self-concept variables were less important predictors of academic success among rural boys. [1091]

GYANANI, T.C. AND GUPTA, M. 1996. **Problems and their effect on the academic achievement of backward class students in relation to their education and generation gap.** *Indian Journal of Educational Research*, Vol. XV(2), 13-22.

Problem: The present study was carried out to study the problems and their effect on the academic achievement of the backward class students in relation to their educational generation gap.

Objectives: (i) To study the difference in academic achievement of first generation learners and non-first generation learners, (ii) to study the problems of first and non-first generation learners of backward castes, and (iii) to study the effect of problems on academic achievement of first and non-first generation learners of backward castes.

Methodology: Sample comprised 100 backward class students (50 first generation learners and 50 onward generation learners) studying in XI Class from Farukhabad District. The Problem Checklist of Joshi and Pandey was used and public board examination marks were collected. Collected data were treated with mean, SD, 't' value and chi-square.

Major Findings: (1) First and non-first generation learners did not differ in the academic achievement. (2) Two groups differed in their adjustment with problems related to the school work and problems related to the curriculum and teaching. (3) The problems of the backward class students did not have any significant effect on the academic achievement of first generation learners group but in the case of non-first generation learners group, the various problems had significant effect on their academic achievement. [1058]

JABEEN, J.A. 1996. **Muslim women's education and their parent's attitude.** *Journal of Indian Education*, Vol. XXII(1), 52-58.

and ST students in technology and engineering, and (iv) to study the problems faced by the SC and ST students in technology and engineering.

Methodology: The sample comprised 33 SC and ST students from faculty of technology and, engineering of the M.S. University of Baroda. Three years (1993-94, 1994-95 and 1995-96) admission data were obtained from the official records and 2 years (1993-94 and 1994-95) results of SC and ST students were analysed. Questionnaire prepared by investigator was administered to the subjects and personal interview was also taken. Data were treated with percentages.

Major Findings: (1) About 6.7% students belonged to SC and ST category in the faculty of technology and engineering. (2) These students belonged to families where about 70% of parents belonged to low status and had low income generating occupations. (3) During the course, majority of students did not face problems related to accommodation and finance. However 25% did face some problems which they were in a position to overcome. (4) 80% of students faced problems in understanding instructions in the classroom. (5) 60% of students failed in their respective classes and the main reasons emerged were language difficulty, teaching methods, lack of sympathetic attitude of teachers, lack of confidence and psychological fear. [1041]

✓KUSUMA, A. 1998. **A study of factors influencing creativity and cognitive styles in tribal and non-tribal children.** *Disabilities and Impairments*, Vol. XII(2), 117-130.

Problem: Present study is an attempt to find out the factors influencing creativity and cognitive styles among tribal and non-tribal children.

Objective: To study how demographic (ethnicity, age and sex), psychological (personality and locus of control) and home environment contribute to the expression of creativity and cognitive styles in Sugali tribal and non-tribal children.

Methodology: The sample comprised 100 sugali tribal and 100 non-tribal children of both sexes representing 10, 11 and 12 years age group by

stratified random sampling were selected from Chittoor District of A.P. The tools used were Mehdi's Test of Verbal and Non-Verbal Creative Thinking, Embedded Figures Test, Matching Familiar Figures Test, Adapted Version of Children's Personality Questionnaire (Siddamma), Rotter's Internal and External Control Scale and Adapted Version of Home Environment Inventory. The obtained data were analysed by t-test, correlation coefficients, multiple regression analysis and multiple discriminant function analysis.

Major Findings: (1) Non-tribal children excelled the tribal children in verbal components of creativity. (2) There was no significant difference between tribal and non-tribal children with regard to non-verbal creativity. (3) The higher percentage (51%) of tribal children were field dependents and higher percentage (55%) of non-tribal children were field independents. (4) There was significant correlation between creativity and field independence cognitive style. (5) In the tribal group, the verbal and non-verbal creativity was not significantly correlated with reflection/impulsivity cognitive style. In the non-tribal group, only verbal creativity was significantly and positively related with reflection/impulsivity cognitive style. [1054]

NARAIN, VINITA. 1996. **Achievement motivation in tribal and non-tribal women.** *Indian Educational Review*, Vol. XXXI(2), 92-98.

Problem: The present study was undertaken to compare the achievement-motivation of the Santal tribal women with non-tribal women.

Objectives: (i) To study whether Santal tribal women differ from that of non-tribal women in achievement-motivation, (ii) to compare tribal and non-tribal women with respect to ten constructs of achievement-motivation, and (iii) to study the effect of two background variables, i.e., mother's education and SES on the achievement-motivation of the respondents.

Methodology: Two hundred Santal and two hundred non-Santal undergraduate women students were selected randomly from different colleges of Santal Paraganas District of Bihar. The Hindi version of Sentence Completion Test by Mukherjee was used to collect the data. Data were treated with mean, SD and 't'-test.

Major Findings: (1) Tribal women had significantly lower achievement-motivation than the non-tribal women. (2) When they were compared with the ten constructs of achievement-motivation, it was found that the non-tribal women did score higher than the tribal women on the constructs. (3) The data did suggest that the tribal women whose mothers were educated were higher on achievement-motivation score compared to women whose mothers were illiterate. (4) SES did not make significant difference with respect to the achievement-motivation score. (5) Achievement-motivation of Santal tribal women varied significantly by the joint effect of mother's education and SES. [1065]

SUERA, GOVINDBHAI S. 1994. **Contribution of the "tribal areas sub-plan" in the education of Adivasis of Sabarkantha District.** Ph.D., Edu. Gujarat Univ. Guide: Dr Y.F. Patel.

Problem: The present study focusses on the contribution of the tribal areas sub-plan in the problems of primary education of Sabarkantha District and the effectiveness of the tribal sub-plan in the problems of all round development of the Adivasis of Sabarkantha District.

Objectives: (i) To study the educational viewpoint of the Tribal Sub-plan, planned by the government, (ii) to study the multiple-welfare schemes of the Tribal Sub-plan, (iii) to study the progress of primary education in four Adivasis Talukas of Sabarkantha District, (iv) to study the educational and physical facilities provided in four Adivasis Talukas of Sabarkantha District due to implementation of the Tribal Sub-plan, (v) to study the impact made by the Tribal Sub-plan on the Adivasis society in four Adivasis Talukas of Sabarkantha District due to implementation of the Tribal Sub-plan, (vi) to compare the primary education among four Adivasis Talukas of Sabarkantha District, and (vii) to suggest instructions for making more effective role to the Tribal Sub-plan.

Methodology: The sample of the study comprised 100 primary schools of four Adivasis Talukas of Sabarkantha District, which were selected randomly. Out of these schools 55 Headmasters and 55 teachers of 55 schools were taken for the study. Besides, 8 educational inspec-

tors, 2 educationists and 2 social workers of each Taluka were interviewed. Questionnaires were developed by the investigator for Headmasters and teachers to collect data. The collected data were treated qualitatively.

Major Findings: (1) The contribution of the Tribal Sub-plan towards small farmers in agriculture, electricity and self-employment, etc., was benefited. So the enrolment of the students was increased. The benefit of this scheme was not taken by the totally poor, non-knowledgeable and illiterate Adivasis. (2) The equal impact of the Tribal Sub-plan could be seen in educational progress in four Adivasis Talukas of Sabarkantha District. The Meghraj Taluka was ahead while the Khedbrahma Taluka was far behind. The Bhiloda and the Vijayanagar Talukas were speedy in educational progress. (3) It was found that the progress of educational and physical facilities increased in four Adivasis Talukas of Sabarkantha District due to Tribal Sub-plan. (4) The basic needs like sufficient number of teachers, rooms for pupils were not provided by the Tribal Sub-plan. So it was quite natural for scarcity of other facilities. [0945]

EDUCATION OF GIRLS AND WOMEN

AURORA, SAROJ AND BHARGAVA, MAHESH. 1998. **Motivational profile analysis of deprived female adolescents.** *Praachi Journal of Psycho-Cultural Dimensions*, Vol. 14(2), 157-162.

Problem: The present study attempts to compare motivational patterns of high and low prolonged deprived adolescents.

Objective: To compare motivational analysis profile of high and low prolonged deprived adolescent girls.

Methodology: On the basis of Prolonged Deprivation Scale, a group of 50 high prolonged deprived adolescent (HPD) girls and another group of 50 low prolonged deprived adolescent (LPD) girls were selected out of 200 girls studying in B.A. (I). Motivational patterns of these HPD and LPD students were measured with the help of Motivational Analysis Test adopted by Kapoor and Singh. The data were treated with profile analysis.

Major Finding: Significant differences were found between both the groups on four ergs — narcissism, mating, pugnacity and assertiveness and two sentiments — self sentiment and sweet heart spouse. [1136]

DANI, V. 1994. **A study of impression management by employed women.** Ph.D., Psy. Guru Ghasidas Univ. Guide: Prof. R.D. Helode.

Problem: This study is centred upon the impression management behaviour of employed women as a function of certain psychological variables.

Objectives: (i) To study the relationship of extraversion with overall impression management and its seven tactics, viz. self enhancement (SE), other enhancement (OE), opinion conformity (OC), changing with situation (CS), instrumental dependency (ID), name dropping (ND) and self degradation (SD), (ii) to study the systematic association between neuroticism and the overall impression management and its seven tactics, (iii) to study the relationship between social intelligence and impression management in general and its specific tactics, (iv) to study the effect of job cadre on the magnitude of overall impression management and its seven tactics, (v) to study the extent to which extraversion, neuroticism, social intelligence and job cadre exhibit their main and interactional effect on overall impression management and its seven tactics.

Methodology: The sample of the study comprised 200 women college teachers and 200 women school teachers working in government girls institutions in the state of Madhya Pradesh headed by women principals. The tools used to collect data were Social Intelligence Test by Shahi, Hindi adaptation of EPI (form A) by Helode, Patil and Pandey and Impression Management Inventory by Helode. The collected data were treated with correlation, 't'-test, ANOVA and Newman Keuls test.

Major Findings: (1) Extraversion was found negatively related to impression management and its tactics with the exception of tactics ND and OC. (2) Neuroticism exhibited a significant positive correlation with impression management and its seven tactics with the exception of tactic OE. (3) Social intelligence was found to be

significantly related to tactic OE. (4) Emotionally unstable women obtained a significantly higher mean as compared to their counterparts for impression management global and its tactics except OE. (5) It was found that global impression management score was influenced only by neuroticism dimension of personality. Extraversion, social intelligence and job cadre did not exhibit any significant influence. (6) The interaction effect of social intelligence and job cadre was found to be significant for impression management global score. (7) The main effect of extraversion and social intelligence was found to be significant for tactic OE. The main effect of neuroticism as well as social intelligence were significant for tactics CS and OC. (8) The interaction effects of neuroticism and extraversion were found to be significant for tactics OE. The interaction effects of social intelligence and job cadre was significant for tactics CS, OC and ID. (9) The three-factor interaction effect of extraversion, neuroticism and job cadre was found to be significant. (10) The hierarchical pattern of seven tactics of impression management for extravert-introvert, emotionally-stable, emotionally-unstable, high and low job cadre groups were identical. SD was the most preferred tactic, whereas ND and ID emerged as the least preferred tactics. [0986]

RAJA, B. WILLIAM DHARMA AND THIAGARAJAN, A. PONNAMBALA. 1998. **School organisational climate and teacher-effectiveness of boys' higher secondary schools in Tuticorin.** *Indian Journal of Psychometry and Education*, Vol. 29(1), 25-30.

Problem: It attempts to study Teacher-Effectiveness and school organisational climate of boys' higher secondary schools in Tuticorin.

Objectives: (i) To measure the teacher-effectiveness in boys' higher secondary schools, (ii) to measure organisational climate prevailing in the boys' higher secondary schools, and (iii) to study the teacher-effectiveness in the boys' higher secondary schools in terms of organisational climate.

Methodology: The sample comprised 279 teachers of eight boys' higher secondary schools and four rural schools of Tuticorin. Two standardised questionnaires were used as tools to seek information from secondary school

teachers regarding Teacher-Effectiveness and School organisational climate. The collected data were treated with mean, standard deviation, critical-ratio, student t-test, Pearson's product moment correlation and ANOVA.

Major Findings: (1) On Teacher-Effectiveness, teachers did not differ significantly with respect to their age, marital status, religion, birth order, caste group, cadre, subjects handled, classes handled, medium of instruction, qualifications and nature and locale of the school where they were working. (2) As regards Organisational Climate, only a controlled climate was prevailing in all the higher secondary schools selected for the present investigation, except in one school where autonomous climate was prevailing. (3) Though there were differences in the type of the management, i.e., government and private schools and area of location of the schools, i.e., Urban and Rural, they did not have any impact on the organisational climate. (4) Efficiency of teachers was low in schools having controlled climate whereas it was average or above average in schools having autonomous climate. [1118]

RATNAPAPA, C. 1998. Personal satisfaction and professional satisfaction of women teachers. Ph.D., Edu. *Sri Padmavathi Mahila Viswavidyalayam*. Guide: Dr G. Vijayalakshmi.

Problem: It attempts to study the personal satisfaction and professional satisfaction of women teachers in Andhra, Nagarjuna, Osmania University areas in three levels namely school teachers, college teachers and university teachers.

Objectives: (i) To develop the personal satisfaction inventory and professional satisfaction inventory to measure personal and professional satisfaction of women teachers respectively, (ii) to examine the significance of the difference between professional satisfaction and personal satisfaction of women teachers, (iii) to examine the effect of some independent variables namely, place, level of institution, designation, educational qualifications, experience, age, sex, role perception, number of promotions, salary, birth order, the family factors such as marital status, sex of children, family size, type of family, education and occupation of family mem-

bers, family income and the institutional factors.

Methodology: The sample of the study comprised 450 women teachers (150 teachers from each category) of three different levels, i.e., school teachers, college teachers and university teachers. The tools used to collect data were Personal Satisfaction Inventory, Professional Satisfaction Inventory, Sex Role Inventory by Vijaya Lakshmi, and a biodata form. The collected data were treated with mean, SD, 't'-test, correlations.

Major Findings: (1) There was a very low and positive correlation between personal satisfaction and professional satisfaction. (2) The women teachers from different university areas, levels of institutions, age groups, income groups, marital status and locality were having different levels of personal satisfaction. (3) There was a positive relationship between sex role perception and personal satisfaction. Professional satisfaction and sex role perception had negative relationship. (4) The different birth order, family size, father's education and occupation, mother's education and occupation, type of institution, nature of job had no impact on personal satisfaction of women teachers. (5) Husband's qualification and occupation had significant impact on personal as well as professional satisfaction of women teachers. (6) Women teachers working on permanent job were professionally more satisfied than the adhoc, temporary and part-time women teachers. [0961]

SANTWANI, S.A. 1997. A study of the perceptions of professional women with regard to professionalism and professional problems with special focus on women teachers in higher education. Ph.D., Edu. *The Maharaja Sayajirao Univ. of Baroda*. Guide: Dr S.D. Patankar.

Problem: The study attempts to inquire into the perceptions of professional women with regard to professionalism and professional problems and comparing the perceptions of the women across the five professions — viz. academics, medicine, administration, law and media.

Objectives: (i) To study and compare the

perceptions of professional women with regard to professionalism, (ii) to study and compare the perceptions of professional women with regard to professional problems, and (iii) to prepare profiles of selected women professionals with outstanding achievements in their respective professions.

Methodology: The sample consisted of 223 professional women belonging to five professions viz. academics, medicine, administration, law and media. They were selected from the cities of Ahmedabad, Vadodara, Surat, Rajkot and Jamnagar. The tools used to collect data included Ranking Scale for Professionalism, questionnaire and an interview schedule. Collected data were treated with coefficient of concordance, and percentages apart from content analysis.

Major Findings: (1) Irrespective of the differential nature, structure, professional ethos and culture of the five professions, the perception of the professional women, with regard to professionalism, did not differ significantly. (2) There were no significant differences in the problems faced by professional women belonging to the 5 professions. However in the male oriented professions like law and administration, the problems were faced by them to a greater degree. (3) From the profiles, it emerged that; family environment and upbringing played an important role in the selection of the profession; planning of career led to professional success; role models, professional images and mentors played an important role; professional training, family-support and their personal attributes were the major facilitators whereas gender-bias, professional rivalry and lack of conducive working conditions were the major barriers which they faced while functioning as professionals. [0958]

POPULATION EDUCATION

AGARWAL, SARASWATI. 1998. **An assessment of awareness among cross-section of society about over population in India and to determine their attitude for encouraging population education in order to develop an outline curriculum for higher secondary school**

teacher-trainees. D. Litt., Edu. Chhatrapati Sahuji Maharaj Univ.

Problem: The present study assesses the awareness among Hindu, Muslim, Sikh and Christian communities about over population in India and determines their attitude towards population education for developing an outline curriculum for higher secondary school teacher-trainees.

Objectives: (i) To assess and compare the awareness among cross section of society towards population problem of India, (ii) to assess and compare the attitude of cross section of society towards population education, (iii) to find out the correlation between various variables related to population problem, and (iv) to develop an outline curriculum of population education for higher secondary school teacher-trainees.

Methodology: A sample of 1,000 individuals (males and females) of Hindu, Muslim, Sikh and Christian communities residing in Kanpur City were selected by stratified random sampling method. Sixty three teacher educators of teacher training institutions of Kanpur City served as the sample for developing an outline curriculum of population education for teacher-trainees. Tools used for collection of data were self-constructed Population Awareness Scale, Population Education Attitude Scale, and an opinionnaire on population education curriculum. The statistical techniques used to treat the data were mean, standard deviation, 't'-ratio, analysis of variance, and coefficient of correlation.

Major Findings: (1) All the groups were aware of the population problem of the country and communities differed significantly in the awareness towards population problem. (2) It has been found that christian community, females, highly educated and trained group were significantly more aware of the population problem than their counterparts. (3) All the groups had favourable attitude towards population education and different communities differed significantly in their attitude towards population education. (4) Hindu community, females, high educated group and trained group had significantly more favourable attitude towards population education than their counterparts. (5) Awareness towards population problem had

significant positive correlation with attitude towards population education, level of education, level of training and per capita income. But awareness towards population problem had significant negative correlation with the number of members in the family. (6) An outline curriculum of population education had been developed by the researcher. [1125]

DEOUSKER, MAHESH. 1994. **Knowledge, attitude and beliefs of secondary school teachers and students of Bundelkhand region about population education.** *Indian Educational Review*, Vol. XXIX(1,2), 77-79.

Problem: It attempts to study the knowledge, attitude and beliefs of secondary school teachers and students of Bundelkhand region about Population Education.

Objectives: (i) To study the knowledge level of teachers and students of secondary level regarding population of India, (ii) to study their attitudes towards population education, and (iii) to study their social, religious and economic beliefs about population education.

Methodology: Using the random sampling method, 251 teachers and 263 students were taken as sample from the Bastar region of Madhya Pradesh. The students belonged to X and XI Standards. A self-constructed questionnaire was used as a tool.

Major Findings: (1) Both the teachers and the students favoured a suitable higher age for marriage of girls and boys. (2) They reported awareness of the population growth, its related problems and the need for control of population through population education. (3) They expressed their choice in favour of two children as an ideal number for every financial group. (4) They preferred teaching of population education at school level particularly at primary and secondary stage by integrating it either with different school subjects or with some specific subject. But at college level, they wished it to be taught/studied as an independent subject. (5) They favoured the use of population methods of family planning. (6) The majority of teachers were in favour of organising population education programmes at different school stages under the Adult Education Programme. (7) As against the teachers, the students expressed a

favourable attitude towards a training programme of population education, if organised. (8) The majority of teachers showed favourable attitude towards the integration of knowledge of population education in their teaching subjects. (9) Both the teachers and students possessed positive attitude/belief as regards religious, social and economic aspects of Population Education. [1028]

YADAV, S.B. 1994. **Cost effectiveness of training modalities in population education.** *Indian Educational Review*, Vol. XXIX (3,4), 187-192.

Problem: The present study attempts to investigate the cost effectiveness of three training modalities in population education, namely, Face-to-Face Interaction Mode, Self Learning Individual Mode and Self Learning Paired Mode.

Objectives: (i) To study the training gains in terms of awareness of population related issues in teachers trained through the three modalities, (ii) to study the training gains in terms of attitude change towards themes and messages of population education among teachers trained through the three modalities, (iii) to study the cost of training teachers in population education using the three modalities, and (iv) to study cost effectiveness of the three training modalities used for teacher training.

Methodology: The sample comprised 96 secondary school teachers from rural schools in Gurgaon District. For the two modalities one teacher from one school, whereas for the third modality two teachers from one school were selected. Tools used in the present study were Population Education Awareness Test, Population Education Attitude Scale, and Training Cost Assessment Sheet. Collected data were treated with mean, SD, F-test, 't'-test and chi-square test.

Major Findings: (1) Teachers' awareness on population issues improved after training under all the three modalities significantly. (2) Face to face modality was found to be most effective. (3) There was no significant difference in the change of attitude of teachers trained under the three modalities. (4) No significant difference was seen among the male and female teachers trained under the three modalities. (5) Profes-

sional qualification of teachers grouped under the three modalities was not related to post-training awareness level of teachers regarding population issues. (6) There was no significant difference in the attitude of male and female teachers towards population related themes and messages under the three modalities. (7) Self Learning Paired Mode was the least costly modality and Face-to-Face Interaction Mode was the most costly modality. (8) Self Learning Paired Mode was the most cost effective modality. [1093]

EDUCATIONAL ASSESSMENT AND EVALUATION

AGARWAL, S.C. AND SINGH, U. 1998, **Effect of scaling on the result of M.Phil students.** *Indian Journal of Psychometry and Education*, Vol. 29(2), 125-128.

Problem: It attempts to study the effect of scaling on the result of the M.Phil. students.

Objectives: (i) To study the effect of scaling on the marks of the students in theory papers, and (ii) to study the effect of scaling on the final result of the students.

Methodology: Eight M.Phil. students of the Department of Education, Chhatrapati Shahu Ji Maharaj University, Kanpur, 1997 batch comprised the sample. The raw scores of these students were converted into the ranks. Thus the students were given pre-scaled and post-scaled ranks. To find out the relationship between pre-scaled and post-scaled marks, Spearman's Rank Difference Correlation Method was used.

Major Findings: (1) There was no significant correlation in the pre scaled and post scaled marks of the students in the theory papers. (2) There was no significant correlation between the pre scaled and post scaled marks in the final (overall) result of the students. [1111]

SEETHARAMAPPA, J. 1995, **Students' self-assessment and assessment of classmates and teacher: A comparative study.** *Journal of Indian Education*, Vol. XXI(2), 51-54.

Problem: An attempt has been made to com-

pare the self-assessment of students with that of their classmates and teacher.

Objectives: (i) To study the self perception of the students on the basis of their performance, (ii) to find out the relationship between teacher's assessment and students' self-assessment and the assessment of the classmates, and (iii) to train the student-teachers about the method of evaluation and to narrow down the distortion if any between the assessments by repeated trials.

Methodology: The sample of the study comprised 56 III year B.Sc. Ed. (5th semester) course students (21 boys and 35 girls) enrolled during 1994-95 in Regional Institute of Education, Mysore. The assessment tests were made on each unit of inorganic chemistry by the investigator. The collected data were analysed with the help of mean, SD and correlation coefficient.

Major Findings: (1) There was no significant correlation between students' self-assessment and teacher's assessment in test 1. (2) Coefficient of correlation between students' self-assessment and their classmates' assessment was not found to be significant in test 1. (3) On second and third tests the assessment of self and teacher, classmates and self, teacher and classmates all correlations turned out to be significant. [1026]

SHRIVASTAVA, NALINI. 1996, **Identification of terminal competencies in home science at Class XII and evaluation of their achievement of students of Gorakhpur District in relation to several background factors.** *Indian Educational Review*, Vol. XXXI(2), 146-150.

Problem: Present study is an attempt towards identification of terminal competencies in home science at Class XII and evaluation of the achievement of students of Gorakhpur District in relation to several background factors.

Objectives: (i) To identify the terminal competencies of rural and urban girls in home science at intermediate level, (ii) to evaluate achievement of the competencies of home science of rural and urban girls at intermediate level, (iii) to find out the effect of socio-economic status on the achievement scores of rural and urban girls, and (iv) to find out different points

of loss ratio of home science scores obtained by rural and urban girls on the lines prepared by Novick and Lewis in the context of corrected items.

Methodology: The population of present investigation include all Class XII students of Gorakhpur District studying home science course prescribed by the Uttar Pradesh Board of high school and intermediate education. Data were collected with the help of multiple choice items written for evaluating the achievement of terminal competencies and Socio-economic Status Scale of B.B.Pandey. The data collected were analysed with the help of correlation coefficient, chance statistics, standard error of measurement, standard error of substitution, standard error of the difference between two percentages and item analysis.

Major Findings: (1) Majority of girls got the scores just in the middle of the range in both the papers of home science. (2) The percentage of mastery level of urban girls was better than rural girls in home science paper I and II. The difference between scores of urban girls and rural girls in paper I and II was significant. (3) There was no high relationship between the socio-economic status and the home science scores of rural girls. (4) The correlation between urban SES and overall scores of home science indicated that there was no high relationship between the socio-economic status and the terminal competencies of urban girls. (5) A study of chance statistics revealed that a vast majority of cases did not blindly guess in both the papers of home science. [1073]

ORGANIZATION, ADMINISTRATION AND MANAGEMENT OF EDUCATION

KHAN, INTAKHAB ALAM. 1998. **A study of relevance of modern management techniques in educational institutions.** Ph.D., Edu. Jamia Millia Islamia. Guide: Prof. Mohd. Miyan.

Problem: This study aims at the relevance of those management techniques that can be used in the educational institutions. However, only software approaches have been attempted to be studied. The study also focuses on the relevance of training programmes for a super ordinate and

sub-ordinates that consequently lead to effective management technique for better results.

Objective: There were five objectives of the study. First four aimed at studying the relevance of management by objectives (MBO) as organizing technique, 'Brain storming' in decision making, theory 'z' in motivating, dynamic style of leadership and finally to ascertain the qualitative variant flowing from the application of management techniques.

Methodology: The sample comprised 540 teachers from 15 schools from each group- government (180), government aided (180) and private type (180). A questionnaire for teachers and an interview schedule for principals were developed by the investigator. Collected data were subjected to mean, SD, 't'-test and qualitative analysis.

Major Findings: (1) There existed no tendency of participation in government and aided schools while in private schools it existed to a considerable extent. (2) There existed no significant difference in the tendency of participation in four aspects — organizing, motivating, decision making and leadership in each type of school. (3) There existed no significant difference between the tendency of participation in three types of schools. (4) There existed a sharp contrast in the perception towards participative management ascertained through the questionnaire and interview schedule. [0973]

KHETARPAL, INDU. 1999. **A study of school performance as a function of management styles and some school variables.** Ph.D., Edu. Delhi Univ. Guide: Prof. R.C. Srivastava.

Problem: The present problem is an attempt to study the school performance management with interpersonal skills.

Objectives: (i) To find out the preferences of principals for each of the twelve management styles grounded in their interpersonal skills and study the trends on principals' choice of Dominant Style/Backup Style and effectiveness through Operating Effectiveness Quotient (OEQ). (ii) to develop a sound criterion, based on multiple indicators, of identifying Performing/Non-performing schools, (iii) to study the nature of relationship between school principal's

management style grounded in her/his interpersonal skills and her/his school's performance, and (iv) to study the nature of relationship between a school's performance and some school variables.

Methodology: The sample comprised 98 heads of schools, 490 teachers, 980 students and four district education officers. The tools used were Styles Profile of Interaction Roles for Heads of School (SPIRHOS), Concept Description Scales, School Teacher Satisfaction Scale and Student Satisfaction Scale, apart from a school data sheet. Mean, SD, Chi-Square, and Mann-Whitney U test were used to analyse the data.

Major Findings: (1) Principals of both performing and non-performing schools were found "equally steady or unsteady", in showing consideration for one or more styles as their dominant or backup styles. (2) Principals who were found "steady" in showing consideration for both their dominant as well as backup styles headed more of the performing schools. (3) There was no relationship between principals' functional/dysfunctional use of simple count of dominant and backup style(s) on the one hand and performance of their schools on the other. (4) There was no significant relationship between school principal's gender and school performance. (5) It has been found that co-educational schools seemed to be performing better than the other two types. (6) Urban schools were performing better than those located in the rural and urban village areas. (7) The number of performing schools in the private category seemed to be more than those in the government and the government-aided category of schools. (8) There was a highly significant relationship between school size and school performance favouring large school size. [1098]

NAGARAJAN, K. 1998. **A study of leadership behaviour in autonomous colleges.** *Experiments in Education*, Vol. XXVI(9), 159-164.

Problem: The present study was undertaken to investigate the leadership behaviour of the heads of autonomous colleges in the city of Madras.

Objectives: (i) To find the difference between the heads of autonomous and non-autonomous colleges with reference to two dimensions of

leadership behaviour, (ii) to find out the effect of sex on leadership behaviour, (iii) to find out the influence of nature of courses (Arts and Science, professional) and types of management of institutions on leadership behaviour.

Methodology: The sample comprised 413 college teachers from 6 government colleges and 16 private aided colleges in the city of Madras. They were administered Leadership Behaviour Description Questionnaire developed by Halpin and Winter. The collected data were treated using inferential statistics.

Major Findings: (1) Results showed that conferment of autonomy has brought significant changes in the leadership behaviour of Arts and Science colleges only and not in professional colleges. (2) Even in Arts and Science colleges autonomy had resulted in promoting only "Human Consideration" aspect of leadership behaviour and not of "initiating structure". [0967]

SUNDARARAJAN, S. AND SABESAN, S. 1993. **Decision making patterns of the heads of schools in Tamil Nadu.** *Experiments in Education*, Vol. XXI(12), 297-303.

Problem: It aims to study decision making patterns of the heads of schools in Tamil Nadu.

Objective: To find out if there is any significant differences between any two pairs of the heads of schools, taken at a time in respect of their given decision making patterns.

Methodology: The heads of schools to the tune of 110 were chosen at random as the sample. Tools used were the Decision Making Questionnaires, DMQ-I and DMQ-II, designed by Leon Mann. The data were treated by using mean, SD and critical ratio.

Major Findings: (1) The decision making patterns in heads of schools were influenced by their educational qualifications, both academic and professional, and years of experience. (2) The gender of the heads did not seem to cause any significant difference in the six patterns of decision making as measured by DMQ-II. (3) The headmasters and headmistresses differed significantly in their use of self-esteem, as a decision maker (DMQ-I). [1137]

CORRELATES OF ACHIEVEMENT

BHARGAVA, VIVEK AND BHARGAVA, MAHESH. 1997. **Attributing causation to success and failure in academic achievement.** *Perspectives in Education*, Vol. 13 (4), 227-233.

Problem: In this study an attempt has been made to identify the instrumental causation of attribution of success-oriented and failure-oriented pupils in their academic achievement.

Objective: To study whether success-oriented pupils would attribute internal factors as causes of their success whereas failure-oriented pupils would attribute external factors as causes of their failure.

Methodology: Sample were drawn in two stages. In the first stage 80 pupils from 4 science sections of Grade X of urban secondary schools in Agra City were administered an achievement test in numerical ability. In the second phase 32 pupils passing the test with 60th percentile considered as success-oriented and 24 pupils falling on 30th percentile as failure-oriented were selected as final subjects. Relevant data were collected by asking subjects to produce at least five causal factors which they attribute to their success and failure in academic achievement in mathematics. The collected data were treated with percentages.

Major Finding: Success-oriented pupils had attributed 80% of the instrumental causes to internal factors and only 20% causes were attributed to external factors whereas failure-oriented pupils on the contrary, attributed 84% of the instrumental causes as external factors and only 10% of the factors were identified as internal factors. [0988]

CHAKRAVARTY, MANIDEEPA BARTHAKUR. 1999. **A study of certain correlates of scholastic achievement of students in Catholic Mission Schools.** Ph.D., Edu. Dibrugarh Univ. Guide: Dr K.K. Deka.

Problem: This study deals with the reasons for a very high scholastic achievement of the students studying in Catholic Mission Schools of Upper Assam and the reasons for parental choice of Catholic Mission Schools.

Objectives: (i) To study the reasons for parental choice of Catholic Mission Schools for their children, and (ii) to find out if there are any correlations between scholastic achievement and level of aspiration, study habit, school environment, family environment, achievement-motivation and self concept.

Methodology: All the students of the English medium, co-educational, Secondary Catholic Mission Schools of the seven districts of Upper Assam, who studied in Class X (boys and girls) in the consecutive years 1995 and 1996 constituted the sample of the study. Tools used in the study were Questionnaire on Parental Choice of Catholic Mission Schools, Study Habit Inventory, School Environment Inventory, Family Environment Scale, Deo-Mohan Achievement Motivation Scale, Self-Concept List, and Scholastic Achievement. Collected data were treated using ANOVA, partial correlation, multiple correlation and 't'-test.

Major Findings: (1) About 90% of the parents chose Catholic Mission Schools (CMS) because these schools taught punctuality and discipline, provided opportunities for extra-curricular activities and moral training. (2) Positive, moderate and significant correlation between scholastic achievement and level of aspiration in the students of CMS was found in the study. (3) Both boys and girls of CMS showed high level of aspiration. But more number of girls than boys possessed higher level of aspiration. (4) Positive, high and significant correlation between scholastic achievement and study habits in the students of CMS was found in the study. (5) The students of CMS possessed good study habits. Boys and girls showed no difference in study habits. (6) There was positive, high, significant correlation between scholastic achievement and school environment among the students of CMS. (7) Both boys and girls of CMS perceived their school environment to be good. Significant difference between boys and girls in the perception of school environment was found. (8) There was high, positive and significant correlation between scholastic achievement and family environment of the students of CMS. (9) Boys and girls studying in CMS came from three levels of home environment, (favourable not favourable and not at all favourable). No significant difference between boys and girls in

home-environment was found. (10) High, positive, significant correlation between scholastic achievement and achievement-motivation, among the students of CMS was revealed in the study. (11) Most students of CMS showed high achievement-motivation. Significant difference was found between boys and girls in achievement-motivation. (12) There was positive, high and significant correlation between scholastic achievement and self-concept among the students of CMS. (13) Most students studying in CMS showed high to average self-concept. There existed a significant difference in the self-concept of boys and girls of CMS. [1086]

JAIN, SHIKHA AND MISHRA, PUSHPA. 1998. **Impact of socialization on academic achievement : Study of adolescents.** *Indian Journal of Psychometry and Education*, Vol. 29(1), 39-42.

Problem: The present study attempts to assess the impact of socialisation on academic achievement of adolescents.

Objective: To study the effect of child-rearing practice on academic achievement of adolescents of Lucknow.

Methodology: The sample comprised 108 adolescents of Standard VIII to X from various schools of Lucknow and their non-working mothers who were university graduates. The academic achievement of children was measured using school records. For measuring child-rearing practices the Hindi translation of the interview schedule given by Sears was used. The collected data were treated using regression analysis, Beta coefficients and 't'-test.

Major Findings: (1) Parental responsiveness was the only significant factor with regard to academic achievement of children. (2) The other factors like punishment, discipline by others, encouraging child's aggressiveness, dependency, restrictions with warning and explaining, restrictions regarding routine activities were not found to be significant at all for child's achievement. [1119]

KHAN, MOHAMMAD AHMAD. 1996. **Gifted achievers and underachievers: Their personality profiles, Need achievement and Socio-economic status.** *Indian Educational Review*, Vol. XXXI(2), 151-155.

Problem: Present research is an attempt to study the personality profiles, need achievement and socio-economic status of gifted achievers and underachievers in rural Kashmir.

Objectives: (i) To identify gifted subjects, (ii) to identify gifted achievers and underachievers, (iii) to study the personality factors, need achievement and socio-economic status of gifted achievers and underachievers, and (iv) to find out the factor constellation associated with gifted achievers and underachievers.

Methodology: Sample was selected in two stages. In the first stage 1,200 male subjects studying in Classes IX and X from the government, high and higher secondary schools of two tehsils of district Anantnag were selected as sample. For final analysis 228 subjects served as the sample retained on the basis of RPM test results. The tools used included Raven's Advanced Progressive Matrices, Urdu adaptation of Cattell's Jr. Sr. HSPQ by the investigator, Urdu adaptation of Mukherjee's Incomplete Sentences Blank by the investigator, and Kashmiri adaptation of Socio-economic Status Scale of Pareek and Trivedi by the investigator. Collected data were analysed by 't'-test and Factor analysis.

Major Findings: (1) Gifted achievers had high super-ego strength, they were responsible, conscientious, persistent, moralistic, emotionally disciplined, dominated by a sense of duty and concerned about moral standards and rules, whereas gifted underachievers possessed low super-ego strength were frivolous, self-indulgent, fickle, undependable and disregarded obligations to people. (2) Gifted achievers were untroubled, self-assured, secure, serene, self-confident, insensitive to people's approval and disapproval and had no fears and conversely gifted underachievers had guilt proneness tendencies, were insecure, worrying, troubled, anxious, sensitive to people's approval and disapproval and possessed phobic symptoms. (3) Gifted achievers had high need achievement, were optimistic, identified themselves with a successful authority and preferred intrinsic rewards when successful. (4) Gifted underachievers had low need achievement were somehow pessimistic and preferred external reward when successful. (5) Gifted achievers had high socio-economic status in comparison to gifted underachievers. [1074]

KUMAR, SURESH. 1993. **The effect of consanguinity on scholastic achievement.** *Indian Educational Review*, Vol. XXVIII(2,3,4), 44-50.

Problem: The present study was carried out to examine the effect of consanguinity on the scholastic achievement of Indian school children.

Objective: To compare the inbred and non-inbred groups on scholastic achievement with regard to mean and variance.

Methodology: Sample comprised 155 children of first cousin marriages and 156 children of genetically unrelated parents from three government higher secondary schools in Jaipur. All the subjects were Muslims with urban background. Tools used were Raven's Standard Progressive Matrices and Socio-Economic Status Scale by Trivedi. Apart from this, scholastic achievement was also measured by annual examination marks. Collected data were treated with mean, SD, variance, chi-square and analysis of covariance.

Major Findings: (1) The non-inbred group scored higher than the inbred group. (2) The scholastic achievement of the children of cousin marriage was significantly lower than the children of genetically unrelated parents. (3) The variance of scholastic achievement was higher for the inbred group relative to the non-inbred one. [1077]

MURTHY, C. G. VENKATESHA AND KULSHRESHTHA, RENU. 1999. **Academic anxiety and academic achievement : A comparison of two management schools.** *Journal of Indian Education*, Vol. 25(2), 29-37.

Problem: Researchers have attempted to study the influence of academic anxiety on academic achievement of students studying in two management schools, on Class IX students comprising boys and girls.

Objectives: (i) To study the influence of academic anxiety on academic achievement, (ii) to study the influence of two management schools on academic achievement, and (iii) to study the significance of difference among different levels of academic anxiety on academic achievement.

Methodology: The sample of the present study

comprised 199 pupils covering 100 boys and 99 girls studying in Class IX, belonging to government and public schools of South Delhi who were drawn randomly. The Academic Anxiety Scale of A.K. Sinha was used as a tool to collect the data. The collected data were analyzed statistically using mean, standard deviation, correlation coefficient, one-way ANOVA and , Duncans' Multiple Range test.

Major Findings: (1) Academic anxiety was found to correlate negatively and significantly with academic achievement. (2) Students belonging to different levels of academic anxiety differed significantly on their academic achievement. (3) Boys and girls belonging to government and private schools differed significantly on their academic achievement. (4) The boys and girls irrespective of their management schools, did not differ significantly. (5) Students belonging to government school and private schools differed significantly in favour of the private school students. [1127]

PATTANAIK, ANJALI. 1994. **Nutritional status and its effect on physical development and educational achievement.** *Indian Educational Review*, Vol. XXIX(1,2), 94-96.

Problem: The present study attempts to assess the nutritional status and its effect on physical development and educational achievement of school going children aged 6 to 9 years.

Objectives: (i) To ascertain the nutritional status of children, (ii) to find out the factors responsible for nutritional deprivation, (iii) to see the effects of nutritional status on physical development, (iv) to find out the effects of malnutrition on educational achievement, (v) to assess the environmental factors responsible for the physical development of children, (vi) to find out the causes of poor educational performance of students, and (vii) to suggest measures for the amelioration of this situation and improvement of the health as well as education of children.

Methodology: Essentially exploratory in nature, the present study involved 336 school-going children in three different settings: urban, rural and slum. To find out their developmental status and educational achievement, four groups of children from each area, in the age-

range of 6,7,8 and 9 years, and from both the sexes, were selected. Tools used included Anthropometric Indices, Questionnaire to Ascertain Physical Development, Interview Schedule, Teacher Evaluating Inventory, and Academic Achievement Records.

Major Findings: (1) The nutritional status of the children was found to be significantly influenced by environmental factors. This was true for children living in urban, rural and slum areas, for the entire developmental sequence, at least 6 to 9 years of age, and equally well for both boys and girls. (2) The physical development of the children was also found to be affected significantly by their nutritional intake and environmental conditions, irrespective of their place of living, age and sex. However, physical space at home, particularly for urban children, was found not to be affecting their physical development, while it was true for rural and slum children. (3) The educational achievement of the children in general was also found to be very strongly influenced by their nutritional intake, parental and home environmental conditions. (4) The relationship between physical development and educational achievement was found to be significant and effective. [1034]

RATH, ARUNDHATI AND PATNAIK, SANGITA. 1999. **Role of maternal disciplinary practices on academic achievement and peer social status among adolescents.** *Experiments in Education*, Vol. XXVII(7), 117-124.

Problem: The present study attempts to explore the role of maternal disciplinary practices on academic achievement and peer social status among adolescents.

Objective: To study the relationship between academic achievement and peer social status among adolescents and type of parental discipline: Power-assertion, Love-withdrawal and Induction.

Methodology: A total of 150 children of Grades VII, VIII, and IX belonging to three types of parental disciplinary practices were selected as samples with 50 children in each group. Tools and techniques used were Assessment of Maternal Disciplinary Practices, Family Background Information Schedule, and Sociometric Status Analysis. Mean and SD were calculated to analyse the data.

Major Findings: (1) The adolescents getting induction type of discipline had better family background than their counterparts. (2) The adolescents perceiving induction forms of parental discipline have made better academic achievement than their counterparts. (3) Adolescents perceiving induction form of parental discipline were found to have better peer social status than their counterparts. [1032]

SALIMKUMAR, C. 1998. **Impact of select factors on academic achievement.** *Experiments in Education*, Vol. XXVI(11), 192-197.

Problem: Present study attempts to explore the impact of factors namely approaches to studying Achievement-motivation, sex and locale on Achievement in Biology.

Objective: To study the main effect and interaction effect of Approaches to studying, Achievement-motivation, sex and locale on Achievement in Biology.

Methodology: A sample of 700 secondary school students studying in IX Standard of Kerala State were selected using proportionate Stratified Sampling Technique. The tools used were Science Studying Approach Inventory developed by Pillai, Scale of Achievement-Motivation developed by Pillai and Salimkumar, and Achievement test in Biology developed by the investigator. The collected data were analysed by four way analysis of variance.

Major Findings: (1) Achievement in Biology was dependent on deep/surface approaches to study and locale, and was independent of the main effect of organised/disorganised method of study, Achievement-motivation and sex. (2) Achievement-motivation, sex and locale had shown a combined effect on achievement. (3) When Deep/surface approaches to study was combined with achievement-motivation, sex and locale, no joint effect on achievement was noticed. [0970]

SINGHAL, SUSHILA AND MOHANTY, NAMITA. 1999. **Teacher empowerment and learning achievement of children.** *Perspectives in Education*, Vol. 15(1), 13-24.

Problem: The present study is an attempt to examine the variations in perceptions of empowerment of tribal and non-tribal teachers in

tribal, non-tribal and mixed schools of Phulbani District in Orissa.

Objective: To examine the issue of effects of teacher and school type on teacher empowerment variables of competency, expectations and teaching orientations in tribal, non-tribal and mixed primary schools and the relation of these to the learning achievement of children.

Methodology: A two layer ex-post facto design was used to select 120 tribal and non-tribal teachers and a total of 600 children of classes IV and V were selected from 56 schools identified in 9 blocks of Phulbani District. Tools used were Teacher Characteristics Description Form by Arora, Teacher Expectation Scale by Mohanty and Teaching Orientation Inventory, and Indian Adaptation of Approaches to Studying Inventory by Entwistle and Ramden. Collected data were treated with ANOVA and correlation.

Major Findings: (1) Non-tribal teachers felt more empowered than tribal teachers in all teaching contexts. (2) Non-tribal schools provided better teaching learning contexts than tribal and mixed schools. (3) Class IV children showed better learning achievement than Class V children. (4) Teacher competency, expectation and teaching orientation correlated significantly with learning achievement of all children. [0989]

VERMA, B.P. AND SHEIKH, G.Q. 1998. **Personality traits and needs as correlates of academic achievement.** *Indian Journal of Psychometry and Education*, Vol. 29(1), 65-70.

Problem: The present study was undertaken to explore the relationship of personality traits and personality needs to academic achievement of adolescents.

Objective: To explore the extent to which personality traits and personality needs facilitate academic achievement of adolescent girls.

Methodology: Six hundred females studying in Class X in six higher secondary schools of Kashmir constituted the sample. The tools used to collect the data were Urdu adaptations of Jr.-Sr. High School Personality Questionnaire (Form A) and Meenakshi Personality Inventory by B.P.Verma and G.Q.Sheikh. Achievement marks of the students were noted from the official

records and treated as academic achievement data. The collected data were treated with Pearson's product moment correlation method.

Major Findings: (1) Out of fourteen personality traits chosen for the study, only three traits, viz. intelligence, conscientiousness, and self-sufficiency have been found to be significantly related to academic achievement. (2) Out of ten personality needs, only two needs, viz. n-achievement and n-aggression have been found to be significantly related to academic achievement. [1122]

VISVANATHAN, G. 1996. **A study of some factors associated with academic achievement in History of XI Standard pupils in Tamil Nadu.** Ph.D., Edu. Annamalai Univ. Guide: Dr. S.S. Williams.

Problem: Present study attempts to assess the influence of several non-intellectual factors associated with the achievement of pupil in history studying in XI Standard at the higher secondary schools of Tamil Nadu.

Objectives: (i) To find out the level of achievement of pupils studying in XI Standard in history, (ii) to find out whether there is any difference between boys and girls in their achievement in history, (iii) to find out whether there is any significant difference in the achievement of pupils who belong to different sub groups such as (a) rural and urban, (b) caste of the pupils, (c) types of schools where they are studying, (d) educational status of the parents, (e) income of the parents and (f) occupation of the parents, (iv) to find out the relationship between social extraversion and achievement in history, (v) to find out the relationship between thinking introversion and achievement in history, and (vi) to find out the relationship between personal integration and achievement in history.

Methodology: By using cluster sampling technique 10% of the higher secondary schools located in six districts of Tamil Nadu were selected. Tools used to collect the data included Achievement Test, Social Extraversion Scale, Thinking Introversion Scale, Personal Integration Scales were selected from form "F" of the Omnibus Personality Inventory by Paul Heist and George Yange. Descriptive analysis, differential analysis, product moment correlation and

multiple regression analysis were used to analyse the collected data.

Major Findings: (1) The achievement of the pupils at the XI Standard level was not satisfactory, though there was a wide disparity in the mean and SD of the different sub-samples. (2) The girls performed better than the boys in the case of those (a) studying in urban schools, (b) studying in government schools, (c) belonging to backward caste, (d) belonging to most-backward caste, and (e) belonging to SC and ST pupils in history. (3) There was no significant difference in the achievement of pupils of those studying in: (a) rural and urban schools, and (b) government and private schools. (3) There was a significant relationship between social extraversion and achievement in history. (4) There was a significant relationship between thinking introversion and achievement, and achievement in history. (5) There was a significant relationship between personal integration and achievement in history. [1038]

LANGUAGE EDUCATION

DAS, J.P., NANDA, SAMBIT AND DASH, UDAYA N. 1996. **Cognitive profiles of poor readers in Oriya language : Are they similar to English readers ?** *Psychology and Developing Societies*, Vol. 8(2), 245-264.

Problem: It attempts to study the cognitive profiles of poor readers in Oriya language.

Objectives: (i) To study whether the good and poor readers of average quality schools differ in terms of their performance on selected cognitive tasks, (ii) to study whether good and poor readers of poor municipality schools differ in terms of their performance on selected cognitive tasks, and (iii) to study the differences between the students from average quality schools and poor municipality schools on selected cognitive tasks.

Methodology: The sample comprised 50 children each in Grades III and V from schools that had an average quality of teaching and 40 children in each of these grades from a school of educationally poor quality. The tools used to collect the data were PASS Battery of Das *et al.* and an adopted version of Word Decoding Test. The col-

lected data were treated using univariate and multivariate analysis of variance.

Major Findings: (1) Good and poor readers of average quality school differed clearly on all the simultaneous and successive tests and they differed on some tests on planning and attention. (2) Good and poor readers of poor quality school differed mainly in terms of their performance on successive and simultaneous tasks. (3) Poor municipality school children obtained lower scores on Digit Span, Matching Number, and Visual Search tests as compared to average quality schools. [1129]

DAVE, J.D. 1996. **An inquiry into the effectiveness of the communicative, the structural and the conventional approaches to English language teaching at secondary level.** Ph.D., Edu. Saurashtra Univ. Guide: Dr H.O. Joshi.

Problem: The present study is an attempt of scientific inquiry of the effectiveness of three different approaches to English Language Teaching (ELT).

Objectives: (i) To compare the effectiveness of the communicative approach and the structural approach to ELT in terms of students' achievement in English, (ii) to compare the effectiveness of the communicative approach and the conventional approach to ELT in terms of students' achievement in English, (iii) to compare the effectiveness of the structural approach and the conventional approach to ELT in terms of students' achievement in English, and (iv) to study the opinions of the students for the communicative, the structural and the conventional approaches to ELT with reference to their learning experiences.

Methodology: A total number of 161 students studying in Standard IX were selected as sample. Nine achievement tests and a Standardized Students Opinionnaire were used to collect the data. Data were analysed by calculating mean, SD, 't'-test and chi-square.

Major Findings: (1) It has been found from the classroom experiment that the conventional approach was most effective. Further, when communicative approach and structural approach were compared, result favoured

communicative approach. (2) It has been found from student's opinion that communicative approach and conventional approaches were favourable. [1106]

DESHMUKH, VINEETA B. 1997. **Development of a need-based course in English language for some polytechnic departments of S.N.D.T. Women's University.** Ph.D., Eng. *Sreemati Nathibai Damodar Thackersey Women's Univ.* Guide: Dr Ayesha Banatwala.

Problem: The study examines the efficacy of the existing teaching system for English in Maharashtra at the polytechnic level, and proposes need based syllabi for 3 disciplines, and offer suitable material for classroom learning activities.

Objectives: (i) To evaluate existing syllabi and teaching material, (ii) to establish specific needs of students of different disciplines, and (iii) to develop appropriate syllabi as well as teaching units illustrative of interactive learning.

Methodology: Relevant data were collected with the help of documents questionnaires and by conducting interviews with students, ex-students and employers. An effort was made to audit lectures and practicals. An effort was also made to study and analyse specific textbooks and question papers for identifying specific language needs of the learners.

Major Outcomes: (1) Existing syllabi were unrelated to specific needs. (2) Existing syllabi were inadequately framed and did not indicate classroom activities. (3) It was suggested that semesters I and II should deal with strengthening English language skills especially for academic needs. (4) It was suggested that semester III + IV should deal with English language skills specifically identified for each discipline. (5) It was suggested that materials for classroom activities should approximate specific linguistic needs in the academic and professional context. (6) Three separate syllabi for three disciplines were designed. (7) The need-based material for classroom activities along with glossaries were also developed. [0957]

HUSAIN, KAUSAR. 1995. **The role of translation as a learning strategy in English as a second language.** Ph.D., Eng. *Aligarh Muslim Univ.*

Problem: It attempts to study the role of translation as a learning strategy in English as a second language.

Objectives: (i) To study the use of translation to enhance L2 learning in general, (ii) to study three different aspects of language, i.e., vocabulary, phrases and tenses influenced by the employment of translation as a learning strategy and (iii) to study as to how the strategy of translation interacts with the level of L2 proficiency.

Methodology: The sample comprised 52 students of Class XII studying English as a second language (science stream) divided equally into control and experimental groups. The tools used included written pre and post tests on vocabulary phrases developed by the author. Collected data were treated with mean, SD, 't'-test and Pearson product moment coefficient of correlation.

Major Findings: (1) A significant difference between the overall per cent gains of the control and the treatment group was seen in favour of treatment group. (2) The pre and post test scores for the control group was not significant. But it was positively significant for the treatment group. [0983]

KHUNTIA, BASANTI. 1996. **Competency-based teaching-learning in mother tongue.** *The Primary Teacher*, Vol. 21(3), 51-58.

Problem: It attempts to study the new approach of competency-based teaching-learning in mother tongue.

Objectives: (i) To study the effect of activity-centred teaching on the attainment of different competencies, (ii) to study the longitudinal improvement in attainment of competencies along three units.

Methodology: The sample comprised 25 children, out of 35, who offered Oriya as first language. To assess the attainment of minimum level of competency fixed earlier, competency-based, criterion referenced tests of diagnostic type were developed by the experimenter. Parallel form evaluation tools were also developed to use on the non-masters found in the first attempt after getting remedial treatment. Percentages were computed to analyse the data.

Major Findings: (1) School-readiness programme, consisting of colourful pictures, action songs, poems, rhymes, games with dialogues, and stories were very helpful to attract the attention of the children to the new surroundings. It motivated them for learning and developed their listening and speaking competencies. (2) The learners actively participated in games, rhymes, stories and songs. This motivated them to tell some new words which were not in the textbook. (3) Repeated drilling of writing words was helpful to all, particularly to some non-masters in that area. (4) Interaction between the learners and the experimenter on immediate environment of the learners was successful and it helped them to develop their competencies in listening with comprehension and speaking. (5) Formative evaluation during the process of teaching learning along with individual remedial measures supported by monitoring system, paved the progress of both competency and content area. (6) Free and affectionate learning environment stimulated the learner for self-expression. (7) Individual attention and personal care encouraged some non-masters to achieve mastery in some of the competencies. (8) More learners were weak in writing dictation in comparison to other competencies. As they had to cover more *maatras*, their spelling errors were increasing. [0997]

KOTESWARA, M.N. AND REDDY, B.R. 1998. **A study of reading achievement in relation to demographic variables.** *Experiments in Education*, Vol. XXVI(11), 198-200.

Problem: The present study attempts to find out the influence of sex, class, locality and region on reading achievement of high school students.

Objectives: (i) To investigate whether there is any relationship between sex and reading achievement among high school subjects, (ii) to investigate whether class has any effect on reading achievement of high school subjects, (iii) to investigate whether locality has any influence on reading achievement of high school subjects, and (iv) to investigate whether there is any regional impact on reading achievement of high school subjects.

Methodology: A sample of 1,296 subjects (equal number of boys and girls) studying in Grades VIII, IX and X among 18 high schools of Andhra

Pradesh were selected. A High School Reading Achievement Test in Telugu was used to measure the reading achievement of the subjects. Mean, SD, 't'-test and ANOVA were used to analyse the data.

Major Findings: (1) Girls were better than boys in reading achievement. (2) Class as a variable affected reading achievement. Subjects of X Standard were found to be far better than that of VIII and IX Class subjects. (3) There was locality influence on reading achievement subjects of residential schools performed better than subjects in rural and urban areas. (4) Region had no significant influence on reading achievement of high school subjects. [0971]

NAJI, ISMAIL MASOUD. 1999. **Reducing grammatical errors through self-correction: A global strategy.** *The Journal of English Language Teaching*, Vol. XXXIV(1), 55-64.

Problem: The present study is an attempt to investigate the effects of self-correction on the eradication of grammatical errors of student-teachers of English in oral speech during their teaching practice.

Objectives: (i) To study whether there would be variations in students' self-correction efficiency, and (ii) to study whether students' self-correction efficiency would vary from one aspect of grammar to another.

Methodology: The sample comprised 4 student-teachers in the English department of the faculty of education, Sana's University. Each of the students were tape-recorded once a week for 45 minutes over a period of 10 weeks during their teaching practice. Students' errors over the 10-week period were analysed according to the Menyuk categories. Percentages were used to analyse the data.

Major Findings: (1) There were indications that most of students' errors were due to little concern about form, since they involved rules that had been studied formally by the students. Given time and focused on form, students were able to correct the majority of their errors. Nevertheless, the fact that students were not able to correct 32.9% of the errors indicated their ignorance or no mastery of the rules. (2) The accuracy increased as learners focussed on

form. Comparison of the number of errors committed during the first week (51) and those committed during the last week (21) revealed that there was value in training the students to discover their errors and get rid of them by themselves, provided they knew the rules and were given sufficient time to do so. (3) The accuracy of self-correction depended upon the performer's efficiency as well as on the aspects of the output he/she attempted to correct. (4) The 'Monitor' seemed to work best for the morphological and base structure errors and to be less efficient for the transformational ones. [1056]

PAHUJA, PREM LATA. 1999. **Effect of peer-tutoring on verbal ability.** *Psycho-Lingua*, Vol. 29(1), 31-38.

Problem: The present study examines the effect of peer-tutoring on verbal ability among junior high school students.

Objectives: (i) To study the effect of intelligence on the verbal ability of students, (ii) to study the effect of peer-tutoring on the verbal abilities and verbal communication of pupils in geography, and (iii) to compare the effectiveness of peer-tutoring with the conventional system of teaching.

Methodology: A sample of 415 urban students in the age group between 11 and 16 years from junior high schools in Agra City were selected using non-probability sampling technique. Two tests, Standardized Mixed Type Group Test of Intelligence by Malhotra and Verbal Ability Test in geography by Gyanani and Pahuja were used as tools to collect the data. The collected data were treated with analysis of variance, analysis of covariance, mean, SD and 't'-test.

Major Findings: (1) A mild role of intelligence was observed as being a causative factor in raising the gains in the verbal abilities of students in geography. (2) Peer-tutoring was a successful teaching strategy for enhancing the verbal ability and the cognitive potentiality of the students. (3) Peer-tutoring was more effective than the conventional system of teaching. [1142]

PATRA, SWATI AND DASH, U.N. 1999. **Reading achievements of children with bilingual media of instruction.** *Psycho-Lingua*, Vol. 29(1), 19-24.

Problem: The present study attempts to examine the reading performance of children who have two languages as their medium of instruction in their school.

Objectives: (i) To examine children's reading achievement on measures of reading, decoding and comprehension in English and Hindi, and (ii) to classify children as high achievers, general, under-achievers, true dyslexics, and instructional failure on the basis of performance on measures of decoding and comprehension in English and Hindi.

Methodology: Sixty subjects from Grade III in the age range of 7-9 years with bilingual medium of instruction (English and Hindi) were selected randomly from the Central School of Bhubaneswar. Word Identification and Passage Comprehension Tests (English) of Woodcock and Word Decoding and Passage Comprehension Tests (Hindi) of Das were used as tools to collect the data. Mean, SD and 'Z' scores were used to analyse the collected data.

Major Findings: (1) In comparison to Hindi, the subjects performed better on measure of English decoding but poorly on measure of English comprehension. (2) 3 children were classified as high achievers, 5 as general under-achievers, and 1 as dyslexic. (3) In the English measures, only one child was included under instructional failure category, while 5 children were classified as instructional failures in Hindi measures. (4) Rest of the children showed average performance. [1141]

SASIKALA, R. 1999. **Oral English Acquisition : Effect of communicative tasks and cognitive strategies.** Ph.D., Edu. *Alagappa Univ.* Guide: Dr S. Mohan.

Problem: The present study attempts to assess the effect of communicative tasks and cognitive strategies on the oral English acquisition among Class XI students.

Objectives: (i) To introduce a task-based course material for oral English acquisition, (ii) to identify the variety of cognitive strategies used by higher secondary students while acquiring oral English, (iii) to find out the utilisation of cognitive strategies in performing communicative tasks, and (iv) to find out the effect of

communicative tasks and cognitive strategies on oral English acquisition.

Methodology: The sample comprised twelve students from XI standard. Data were collected through Communicative Tasks Package and Oral English Assessment Scale. The researcher used qualitative as well as quantitative analysis to treat the data.

Major Findings: (1) Communicative tasks facilitated oral English acquisition. (2) Group work and pair work tasks enabled students to acquire more English. (3) Role-play tasks helped acquire oral English. (4) Imagery was the most used strategy. [1097]

VIJAYALAKSHMI, S. 1998. **A study of the predictors of reading ability of students studying in VII Standard of Bangalore City.** Ph.D., Edu. Bangalore Univ. Guide: Dr T.K. Jayalakshmi.

Problem: This is a study on the predictors of reading ability of students studying in VII Standard of Bangalore City.

Objectives: (i) To find out the factors influencing the reading ability of students, (ii) to find out the inter-relationship among the various independent and dependent variables, (iii) to identify the predictors of reading ability of students, (iv) to find out the extent of variance in reading ability explained by each predictor variable, and (v) to develop a theoretical path model using the variables under consideration.

Methodology: The sample comprised 623 boys and 578 girls from private and aided English medium schools situated in Bangalore south and Bangalore north Districts. Tools used for the study were Reading Test, Non-Verbal Test of Intelligence, Sinha's Anxiety Scale, High School Personality Questionnaire (HSPQ), Rao's Achievement Motivation Tool, Socio-economic Status Scale, and Home Environment Questionnaire. Data were treated with zero-order correlations, multiple correlations, multiple regression, and path analysis.

Major Findings: (1) There was a significant difference in the reading ability of boys and girls. (2) Intelligence, sex, personality, achievement-motivation were positively and significantly re-

lated to total reading ability. (3) Anxiety of the VII Standard students was negatively and significantly related to the total reading ability. (4) The correlation between socio-economic status and the total reading ability was not statistically significant. (5) The home environment of students studying in VII Standard was negatively and significantly related to the total reading ability. (6) Intelligence, personality (HSPQ), sex, achievement-motivation and anxiety had turned out to be the significant predictors of total reading ability explaining 17.16% of the variance in it. (7) Socio-economic status did not turn out to be a significant predictor of the total reading ability of students of VII Standard. (8) Intelligence made a significant contribution to the total reading ability of boys accounting for a variance of 30% . (9) The total reading ability of girls was greatly contributed by intelligence. [1089]

VORA, P.R. 1995. **Development and standardization of Barrett's Taxonomic Silent Reading Comprehension Test in English for the eleventh graders.** Ph.D., Edu. Bhavnagar Univ. Guide: 'Dr J.D. Bhal.

Problem: The present study aims to measure the achievement on Silent reading comprehension test, based on Barrett's Taxonomy in English, of the pupils of Standard XI, studying English as an optional subject in Gujarati medium schools in Gujarat State.

Objectives: (i) To develop and standardize a silent reading comprehension test in English on the basis of Barrett's taxonomy for the pupils of Standard XI, (ii) to find out gender-wise and area-wise differences in the mean scores on the test with reference to the four geographical zones of Gujarat State, (iii) to find out gender-wise and area-wise differences in the mean scores on the test with reference to the four levels of silent reading comprehension showed by Barrett, and (iv) to develop various norms for the silent reading comprehension test in English for the pupils of Standard XI.

Methodology: The sample consisted of 2,042 pupils including 995 urban boys, 709 urban girls, 224 rural boys and 114 rural girls from all the four zones. The tool used was a silent reading comprehension test having eight prose

passages with eight multiple choice items developed and standardized by the researcher. Mean, median, SD, Q, Sk, Ku, ANOVA and CR-value were calculated while treating the data. Area-wise and gender-wise norms were established.

Major Findings: (1) The boys and girls did not differ significantly on the achievement of read-

ing comprehension while the urban and rural pupils differed in favour of the urban pupils. (2) The pupils of north zone were found to be highest in their achievement on SRCT while the South zone pupils were found to be least. (3) On different levels, boys and girls did not differ except on 'literal level' where girls were found better. [1102]

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